

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful



AUGUST 15, 1938



Ampelopsis Heterophylla

**Color Photography as Sales Aid
New and Uncommon Perennials
Compiling a New Nursery List
Identifying the Lindens**

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

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TRADE OUTLOOK.

At a half-dozen meetings in the past month nurserymen have been trading notes and likewise stock. From their reports and activities it is apparent that they consider the outlook for autumn business much more optimistically than they did a few months ago. Whether this is a reflection of improvement in general confidence regarding the business situation, or whether it is a response to forward bookings of individual firms, the effect is the same. Increase in building activity and in government spending will definitely be felt in this field. Trade accounts are in good shape, and the public has money in the bank. On such a sound basis, nurserymen are devoting the thoughts to sales efforts.

CLOSER TO MEMBERS.

Progressing under the new by-laws to bring the organization still closer to its members, the American Association of Nurserymen at Detroit adopted the idea of sponsoring regional meetings through the year, so that individuals not in attendance at the national gathering might obtain as many as possible of the benefits of belonging to the A. A. N.

In the meeting of delegates from the central region, impetus was given to this idea by planning to hold a regional meeting in connection with the annual convention of the Illinois State Nurserymen's Association at Chicago next January. Since the mid-winter gathering at Chicago draws a considerable number of nurserymen from surrounding states, it will be an

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opportune time for the A. A. N. members in the area to sit in one or two sessions devoted to affairs of the national body and derive the same advantages of contact with the association's activities as do those individuals who attend the national convention.

In the other regions, similar meetings will be held, it is expected, in connection with a well attended, established annual gathering of a state or sectional organization within each region. Thus no extra meetings will be added to the nurserymen's calendar, but they will derive the advantage of a more direct contact with A. A. N. affairs than has been available to those not in attendance at the national convention.

AMPELOPSIS HETEROPHYLLA.

Ampelopsis heterophylla, often referred to as *Vitis heterophylla*, is one of the more beautiful, but less popular species of the genus. It is a vigorous climber, with an abundance of turquoise-colored fruit, which add greatly to the vine's attractiveness in autumn.

The apparent lack of popularity of this vine may be due, in part, to the fact that those catalogues which do list it often refer to it as being less hardy than other species of ampelopsis. However, plantings of *Ampelopsis heterophylla* are known to survive in regions where the temperature reaches 25 degrees below zero. It is possible that once this matter of hardiness is straightened out the popularity of this species will increase.

This beautiful vine, with its abundance of porcelain-like, light blue berries in autumn, is especially well adapted for covering rock ledges, walls, low trelliswork and rustic bridges, making rather dense growth. It has rather large leaves, with coarsely toothed lobes. The number of lobes varied from three to five, sometimes even seven. The young leaves of the variety *elegans* are beautifully tinted with pink, and as they mature they become blotched and striped with white.

Ampelopsis heterophylla is easy to propagate. The seeds may be sown as soon as ripe, or kept moist until spring and then sown.

Layers or cuttings made in the spring from softwood root freely in gentle heat. Hardwood cuttings may be taken in September and pricked out under glass or in a closed frame. Softwood cuttings may also be taken in the summer under glass.

The mature vine reaches a length of thirty to thirty-five feet. It climbs by twining tendrils, not clinging by disks to its support as does *Parthenocissus tricuspidata*, known commonly as *Ampelopsis Veitchii*.

Landscapers and nurserymen should find many uses for this rambling plant, and once it becomes better known the general public will undoubtedly demand it in much greater numbers.

AZALEA ARNOLDIANA

Donald Wyman, horticulturist at the Arnold Arboretum, has called attention to the illustration on the cover of the May 15 issue as typical of the characteristic growth of *Azalea Kaempferi*, one of the parents, rather than of *A. Arnoldiana*. He and Dr. Rehder went so far as to visit the Dexter estate, at Sandwich, Mass., where so many fine things from the Arnold Arboretum are planted and where the photograph was made. He states that the true *A. Arnoldiana* is considerably more horizontal in its branching than the plant shown on the cover of the May 15 issue. *A. Kaempferi* is upright in growth. *Arnoldiana*, while not classed as an evergreen azalea, even in Boston has a certain amount of foliage that is evergreen, such foliage not appearing on *Kaempferi*.

The name *Arnoldiana* was given to seedlings resulting from hybridization of *A. amœna* with *A. Kaempferi* by the late Jackson Dawson when he was superintendent of the Arnold Arboretum. From his collection of seedlings a number of selections were made, as there was wide variation in the resulting plants. Most, if not all, of the plants originally studied have been discarded by the arboretum in preference to a few of the better growing ones with good form and color, and these better forms are those now offered in the trade. The varieties have been named, but are classified as a group under *A. Arnoldiana*.

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Color Photography as Sales Aid

*Possibilities of Color Camera as a Means of Interesting Prospects and
Increasing Sales Being Tested by Nurserymen—By George Siebenthaler*

All of us in the nursery business are feeling the increase in competition, not only among ourselves, but also with other industries. We have to show the public that our merchandise and service are worth more to them than a new radio or a new automobile, that they can give them greater pleasure than the same money spent on new furniture or on travel or in some other way. Especially do we feel this competition in a period of depression, when high-powered salesmanship and sugar-coated easy payment plans are employed in the lines of business that strive with us for customers' dollars. Under such conditions we must seek ways to make sales in the face of this competition.

Means to increase the sale of nursery stock have been sought for years. Largely, the advertising done has been of the institutional or good-will type. Individually, we have relied upon the name we have made in our community to bring people to us who are interested in buying what we have to sell. The effort to take our merchandise to them by means of special sales, cut prices or door-to-door canvassing has met with small success.

Consequently, a large proportion of prospective buyers know little of our merchandise or our service. They are not told what we have to offer, and they do not appreciate its comparative value.

An experience of our own firm illustrates this fact well. A prominent man came to us two years ago. He was going to build a residence costing from \$40,000 to \$50,000. We discussed landscaping for the grounds about such a home, and he included

a liberal sum for that purpose in his tentative budget covering the cost of the home. After that, the matter was permitted to drop for eight or nine months while the house was under construction. When it was two-thirds done, and consideration of the landscaping was again due, he asserted that he had already spent on the construction of the house three times the sum he intended. He had been "taken for a ride" by the builder, and in consequence it was necessary for him to revise his budget with regard to the landscaping, and he eventually spent only one-half what was originally contemplated for that purpose.

This is a typical case and will be repeated until the public is taught the value of the product we have to offer, so that it is not relegated to second place when the construction of a home is under consideration. The manufacturers of all the materials that go into the construction of a house keep their products constantly before the public. The manufacturers of new and improved styles of equipment—plumbing, heating, air conditioning, furniture, etc.—for the house are continually hammering away through conspicuous magazine advertising, generally in colors. To meet this competition we have a real job of advertising on our hands.

Nurserymen have found the reproduction of colored pictures by printing to be expensive. Its use has consequently been limited. This is true with reference to those engaged in landscape service, more than of those selling plants direct to the public by catalogues.

To some extent, the use of hand-colored slides has been adopted, but not always found satisfactory. This medium is comparatively expensive and less accurate, in contrast to the use of direct color photography with the use of improved cameras and the latest color film.

Progress has been made in this direction so rapidly that, although my work has been over a period of less than a year, the pictures taken recently show a vast improvement over the earliest ones, because of the character of the new film and the better camera employed.

Our original idea was to make up a set of slides which might be shown before garden clubs, civic organizations and the like, to build up interest in our product and service. After the color film upon which the exposure is directly made has been developed, each tiny picture can be mounted at less expense and with greater durability than the hand-colored slide. By building up collections of photographs on related subjects, it is possible to illustrate a talk or lecture before a garden club or other organization, and this has been done to good advantage.

Another way to use these photographs would be to show them to customers, either in their own homes by the use of a small projector and screen, or in the nursery office where such equipment might be maintained. In some places nursery firms already have rooms designed for the entertainment and instruction of customers in this manner.

The color film which is used for the slide may be reproduced in larger

size as a photographic print, to be shown to prospects just as a printed color plate would be used. Of course, a greater variety is possible at smaller cost than a considerable collection of colored plates would entail.

The use of color photography for the purpose of informing buyers has many possibilities. Those who deal with us—meaning all nurserymen—lack familiarity with our products. They want information. We should be in position to give it to them.

Not long ago we completed a rather elaborate landscape job for a client of ours. When it was done, he made the statement that he had not realized we could produce such an effect for him. If he had known it, he would have undertaken more, he said. Here we did not sell so much as we might have, because we were not able to inform the prospect as to what we could do.

By the use of color photography we could show our prospects not only the landscape effect to be achieved, but also construction details, so that they might perfectly visualize the project contemplated. It would be much easier to build up the enthusiasm of the clients necessary to secure a handsome order if we could present actual pictures to their eyes, rather than to try to portray our images in words.

A further use of color photography would be for the clarification of identity, where there is some doubt as to the plant's passing under a given name in the locality. Along this line, the education of our customers might be carried along considerably by our obtaining a sufficiently complete collection of photographs to show the character of the plant, the character of the flower, the character of the foliage and their respective effects in the landscape.

The procedure is not difficult. One may learn to be sufficiently expert with a camera in a reasonably short time. The camera for this type of photography should be the 35-millimeter size, and any of the popular makes with a good lens are satisfactory, though for best results the Leica and Contax cameras have been found most useful. These cameras have built-in range finders, which facilitate rapid focusing on the subject. An exposure meter is absolutely necessary to secure the proper exposure for color photographs. The best type of color

film is the Kodachrome, made by the Eastman Kodak Co. The processing of the film is done at the factory, and the cost is included in the original purchase price of the film. When the processed film is returned, the small colored transparencies are mounted with a mat between two glasses two inches square and bound around the edges. The slide is then ready for projection, or by a special process direct color prints may be made from these in enlarged sizes of 7x8 or 8x10 inches.

The undertaking is a sizable one because of the time required, through the seasons of the year, to obtain all the pictures one may wish for a particular group or collection. Since it is rather tedious and somewhat costly, it might be made a coöperative project or an association one. In the course of a few years, however, one may build up a sales medium which will bring back the investment manifold, by increasing the number of sales and the size of each one, and by making them more easily.



Youngest of the four brothers in the well known nursery firm at Dayton, O., George Siebenthaler has implanted upon a nursery background a thorough study of landscape architecture that gives him an invaluable perspective, as those who heard his talk on color photography as applied to sales, at the A. A. N. convention at Detroit, well realized. Born June 2, 1905, he studied at Cornell University from 1923 to 1929, receiving the degrees of bachelor of architecture and bachelor of landscape architecture. He was awarded the annual scholastic medal for general excellency by the American Institute of Architects. He has had practical training with Bryant Fleming, Nashville, Tenn.; Noel Chamberlain, New York, and the Westchester county park commission, Bronxville, N. Y. He traveled and studied landscape architecture for nine months in 1931 in England, France, Spain, Italy and Germany. Since 1932 he has been associated with the Siebenthaler Co., doing general landscape designing.

MAPLE WILT.

Maple wilt causes a great deal more damage than most people realize, in many cases killing the tree.

Maple wilt is not a spectacular disease. The leaves just wilt and hang. Then a limb or two in the crown dies. Frequently a single branch will show symptoms, but often several, one above the other, will die. A slimy area may show on a branch or the trunk, or a moist soft spot in the bark. Below dead or dying places sprouts and suckers appear, giving to the crown a broomy look. The most reliable symptom is the appearance of greenish streaks in the sapwood of the infected areas. These may run out into the wood for considerable distances.

Maple wilt is a fungous disease, which gains entrance through injuries caused by lawn mowers, pruning tools, insects, animals, automobiles, etc. Since it grows in the conducting tissues of the tree, it may gain a foothold before any symptoms show in the leaves. Vigorous trees seem to succumb more rapidly than the less vigorous ones.

The best thing to do is to cut out the diseased parts with sterilized tools and cover the cut place with a protective antiseptic solution. A coating of shellac followed by an equal-parts mixture of creosote and coal tar has been recommended by the United States Department of Agriculture. The same treatment would be a good preventive when pruning. All infected parts should be removed and burned.

ALLUMII CYPRESS CANKER.

A serious disease of the Allumii or blue cypress, *Chamaecyparis Lawsoniana Allumii*, has been found in three different Oregon nurseries. The same type of fungous organism has been isolated from the roots and crowns of plants taken from these nurseries. No such disease is known for this cypress, but a similar fungus causes a serious canker disease on citrus trees.

This trouble on the Allumii cypress is characterized by the tree's first appearing off-color and then gradually changing to uniform brown discoloration. At the time the tree first shows symptoms of the disease a band of dead bark can be found at the soil line; this eventually girdles the tree and causes its death.

Compiling a New Nursery List

Second in a Series of Articles Dealing with Selection of Superior Varieties of Woody Ornamental Plants Lists Ten Ground Covers—By L. C. Chadwick

It will be recalled that in the first of this series of articles the woody plants to be discussed were divided into seven size groups, ranging from the vines, group 1, to standard trees, group 7. In this second article I should like to devote some attention to group 2, the ground covers—spreading types which are about one foot high or less.

Before starting our discussion of these plants it might be well to repeat that the main purpose of this series of articles is to bring to the attention of nurserymen the possibility of eliminating many inferior types of woody, deciduous and evergreen ornamentals.

A group of plants which finds a place in nearly every landscape planting is one suitable for ground cover purposes. Terraces, rocky knolls and steep banks usually demand a covering of some sort. Plantings along highway cuts and fills are a notable example. Because of the soil conditions often existing in such locations, grass does not make satisfactory growth, and the homeowner demands an ornamental plant. As is well known, most of the satisfactory ground cover plants for refined plantings are broad-leaved evergreens. These types will be discussed in a later article. Within the deciduous group the satisfactory types are limited. The following ten are my choice:

Cotoneaster himalayacus
Evonymus nanus—Dwarf burning bush
Evonymus obovatus—Running evonymus
Hypericum Buckleii—Mountain St. John's-wort
Lonicera japonica Halliana—Hall's Japanese honeysuckle
Rosa Max Graf—Max Graf rose
Rosa Wichuraiana—Memorial rose
Rubus hispidus—Swamp dewberry
Vaccinium pennsylvanicum—Low-bush blueberry
Zanthorhiza apiifolia—Yellowroot

If a survey is made of the possible plants that come in this group, it will be found that the above list includes most of the known types. Omitted are the common plants, *Lonicera Henryi*, *Rosa nitida* and *Rosa Roulettii*. The second, however, is often too large to be placed in this group. It will be noticed that a good many deciduous plants commonly used for

bank cover purposes are omitted from the selected list. This is done intentionally, since they are too large to be included in this group of definite ground covers.

This selected list of deciduous ground cover plants may be further divided into two types, (1) those that are distinctly ground covers and (2) those that are small dwarf plants, well within the limits of the size group, but less inclined to spread. *Cotoneaster himalayacus* and *Evonymus nanus* are members of the second group. *Hypericum Buckleii* and *Vaccinium pennsylvanicum* might be considered on the borderline between the two groups. They are slow-growing in our locality, but spread considerably with age. All the others belong to the distinct ground cover group. It will be well to discuss briefly a few of the outstanding characteristics of these plants.

Cotoneaster himalayacus is rare in the trade, but is a good addition to our low plants suitable for rock garden planting. The plant is distinctly prostrate, often following the contour of the soil or rock over which it grows. The leaves are nearly round, dark green above, lighter beneath and hairy.

Evonymus nanus, the dwarf burning bush, is also rare in the trade and its general habit of growth and foliage characteristics will probably not lead to its extensive use. It is generally seen as a low shrub with ascending branches not much over a foot high, but occasionally reaching three feet. It is possibly best used as a small specimen, although often spreading enough to make a cover for rocky slopes of limited area. It can be grafted onto upright stems of *Evonymus europaeus*.

Evonymus obovatus, the running evonymus, has proved only partly satisfactory in our ground cover tests at Ohio State University. Under mid-western conditions it should have at least partial shade. The plant is hardly more than a foot high, with spreading, procumbent stems and light green leaves. It does not fruit abundantly, but the brilliant red autumn foliage

color is attractive and one of the outstanding characteristics of this shrub.

Hypericum Buckleii, the mountain St. John's-wort, deserves further trial in the eastern states, where some excellent plantings have been seen. In our tests at Ohio State University it has not proved satisfactory. It has been given little shade, since this is the condition enjoyed by most of the hypericums. It is possible, however, that this type will do better in the midwest with at least partial shade. The plant is slow in spreading, often forming more of a tufted mass. The ascending stems bear small leaves, usually about one-half inch long. The yellow flowers are large for the size of the plant, often reaching an inch in diameter. Its use will be mostly for rockery planting.

Lonicera japonica Halliana, Hall's honeysuckle, is so well known that it does not need any discussion. It is unquestionably the best of all the deciduous ground covers for extensive plantings, such as often exist on highway jobs. The Henry honeysuckle, *Lonicera Henryi*, may be as satisfactory, but it is not so well known. The two differ so little in their landscape effect that it is doubtful if there is any reason for growing both of them. The most noticeable difference is in the more hairy condition of the stems and leaves and the development of a more red or reddish purple flower in *Lonicera Henryi*.

Rosa Max Graf, a hybrid between *Rosa rugosa* and *Rosa Wichuraiana*, is a worthy addition to our list of creeping plants for rocky slopes. Its best effect possible comes when it is allowed to develop unrestrictedly over a rocky knoll. In such conditions its pure pink flowers and characteristic *rugosa* foliage make a wonderful sight. It has done well in central Ohio and should be more extensively used.

Rosa Wichuraiana, the memorial rose, also finds a place on our list because of its more dainty habit of growth than the Max Graf. As is well known, the small white flowers and glossy, dark green foliage are quite attractive. As with the Max

Graf rose, it is at its best when allowed to run unrestricted. It is so nearly evergreen that it is effective in winter as well as summer.

Rubus hispídus, the swamp dewberry, is of limited use, but because of its satisfactory growth in shade it has some possibilities for naturalizing. In addition to shade, it should be given an acid soil and plenty of moisture. The foliage is three-parted, thick and dark green, remaining on the plant during most of the winter. The small white flowers are attractive.

Vaccinium pennsylvanicum, the low-bush blueberry, has done surprisingly well in our ground cover tests. Planted in nearly full sun, with considerable peat moss worked into the soil, as well as used as a mulch, the small bushy plants have spread quite rapidly. An acid soil should be provided. The plant is probably best adapted as a ground cover for open wooded areas, where it will provide food for birds as well as exhibit its brilliant red foliage color in autumn. It also deserves more extensive use in rock gardens, as the foliage and flowers are especially interesting.

Zanthorhiza apiifolia, the yellow-root, while not so attractive as many of the other deciduous ground covers, is useful for covering steep banks and slopes. It spreads rather rapidly and grows loosely to a height of something over a foot. The finely cut foliage and small brownish purple flowers produced in April and May are attractive.

As will be gathered from the descriptions, few of these deciduous ground cover plants will be used in refined plantings. They are best adapted for covering steep banks and slopes for erosion control or for naturalistic planting. Other than for Hall's honeysuckle the demand for these types will not be great, but they are adapted to a few situations where few other plants will do well.

The next article of this series will discuss the dwarf or low deciduous shrubs of one to three feet in height.

SHOW DRAWS CUSTOMERS.

The rose garden at its nurseries is a successful means of attracting the public as employed by the Hillsdale Landscape Co., Indianapolis, Ind. This year a two weeks' rose show was climaxed on a Sunday in

June by the firm's second annual rose festival.

Two years ago, a half-acre plot of ground, adjoining the rock garden, was laid out as a garden, in which the potted roses could be displayed and from which sales could be made directly. Besides the rose beds, different types of hedge materials, specimen plants, garden ornaments and garden structures were included. A combination shelter and sales booth of stone and heavy timber was added this spring.

Both the attendance and sales were remarkable, it being estimated that 8,000 persons visited the nursery on the single afternoon. Such an attendance is quite gratifying when it is known that the nursery is five miles from the city limits of Indianapolis, and two miles off the nearest highway over narrow gravel roads. "We feel that such a number of visitors in so short a time is of record proportion, certainly for a nursery in so

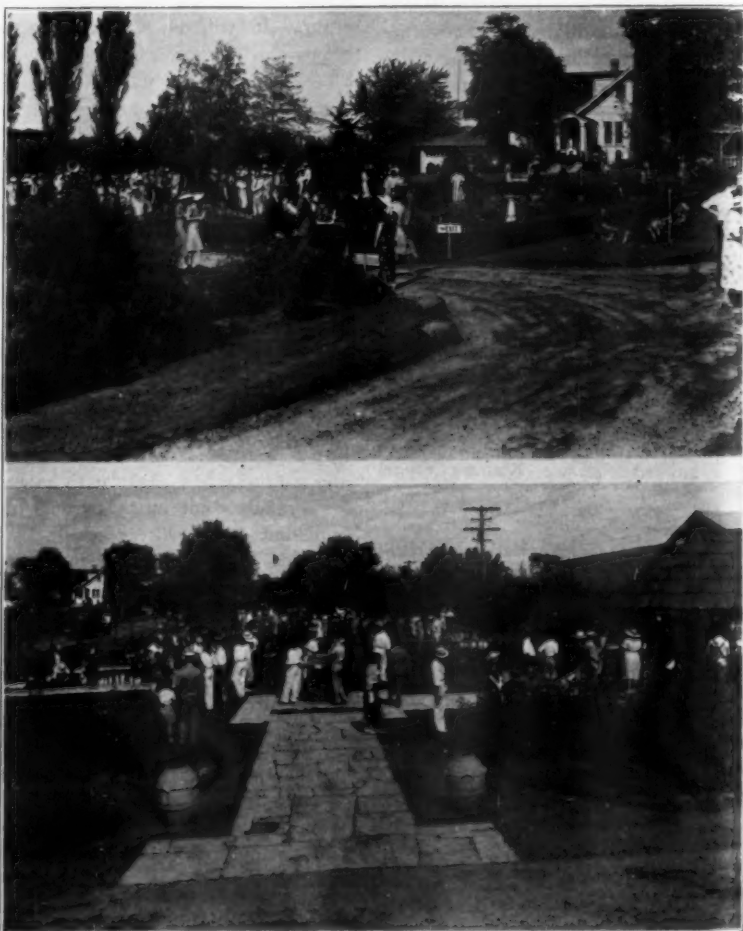
difficult a location as ours," remarked Alex Tuschinsky, the proprietor.

The Boy Scouts ably assisted in the reception. Refreshments were served to everyone by the Cub Scouts and their mothers. The older Boy Scouts directed traffic, and a concert was given in the formal garden by the Boy Scout band. Several Indianapolis garden club members assisted in the reception and distributed rose culture pamphlets.

A popular event in midafternoon was the crowning of the rose festival queen, selected by the judges from the entries made during the previous week. Mr. Tuschinsky presented her with a loving cup.

Newspaper advertising was run at various times during the preceding week, and much news space was given to the festival by the Indianapolis News and the Star, both papers running pictures of the garden and rose queen entries.

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Views of Rose Garden at Indianapolis Nursery during Sunday Show.

Identifying the Lindens

Ninth Article Concludes Series with Discussion of the Lindens of Asia and Their Origin—By Leon Croizat, of the Arnold Arboretum

Few are the Asiatic lindens that can be seen alive in the northeastern and midwestern states. My knowledge of cultivated material is restricted to these few species and to these few trees. With material so scanty on hand I should perhaps not dare to venture the opinion that I dislike the lindens of Asia and that I find them generally inferior to the lindens of Europe. Though the plants that I have seen mostly have an irregular habit and coarse leaves, it seems sure that good forms of species now appearing undesirable are to be found in eastern Asia. It should be granted, furthermore, that plant material may or may not be commended according to climate and local conditions.

To make my thought clearer: *Tilia* Tuan is native of China and finds an uncongenial climate at the Arnold Arboretum. I may not recommend it as I know it. This linden, however, is full of "character"; it has a leaf which is peculiar, nearly toothless, but with the main veins ending in free tips beyond the margin of the blade. Were I living south of the Potomac I should like to try this linden, feeling reasonably sure that it can be used in design and in planting which requires a touch of quaintness. Thus, rather than expressing dislike for the lindens of Asia, I should say that these lindens are not yet well known. What is certain meanwhile, and interests us here, is that nurserymen and practical plantmen cannot be expected to take the trouble of learning the fine points of the identification of trees that are mostly seen as curios in botanical gardens and in arboreta.

I wonder, this being the case, whether I may not discuss the lindens of Asia in a manner which seldom is used to discuss plants in popular articles. I may, for instance, state a few facts to explain why and how the cultivated lindens of Asia resemble the lindens of Europe and of America. The reader will forgive me if, to do this, I am forced to "take a flyer" through thousands of miles and a few million years.

It is a matter of common knowl-

edge that native woody plants of temperate North America do sometimes closely resemble plants of Asia and Europe. Nurserymen are familiar with *Viburnum Opulus*, *Viburnum trilobum* (*americanum*) and *Viburnum Sargentii*. Though the first-named is native to Europe, the second to North America and the third to northeastern Asia, these three species are so closely related that it is nearly impossible to separate the last two when the country of origin is not known.

Examples of this sort are rare, compared with the numerous instances in which a plant of our ranges is found closely to match only an Asiatic plant. Still to use viburnums as an example, I shall mention here *Viburnum furcatum* and *Viburnum alnifolium*, of which the former is native to Japan and the latter to the northeastern part of North America. So much alike are these viburnums that considerable botanical skill and good material are required to identify the one as distinct from the other. In Europe there is no viburnum that closely matches these Japanese and American shrubs.

This peculiar plant distribution has arisen from natural causes because miracles do not take place in nature. It is certainly not due to the hand of man that the seeds of these last-named viburnums were sown in Japan, withheld in our west and planted in the lands between Minnesota and New Brunswick.

Many, though not all, of our cultivated woody plants have originated ages ago in a large land that probably stood near the north polar regions of modern maps. From this land these plants have percolated southward—if I may so say—reaching in course of time the regions that are known to us as America, Asia and Europe. In these continents these plants became established more or less in the forms that are familiar to us today.

If this is the case—the reader may inquire—why is it that certain plants have survived only in one or in two of the three continents?

So far as the matter can be under-

stood in its broader aspect, the reason is that in a period of time not too far remote Europe, America and, to a much lesser extent, Asia underwent long spells of severe cold. To escape the effects of this cold, plants tended to migrate southward. In Europe many of the migrant species ultimately got jammed against the Mediterranean sea, that runs moat-like between Europe and Africa. Approximately at the shore of this sea these species perished like soldiers caught with their backs against an impassable river. On the average, Asiatic and American plants fared better. They had plenty of range open southward and they traveled through it to get out of the reach of the worst cold. Thus *liriodendron* died out in Europe, but survived in China and in the United States. The viburnums of the *Opulus* group, on the other hand, chanced to survive in all the three continents.

If so—the reader may be further tempted to inquire—why is it that species like *Viburnum furcatum* and *Viburnum alnifolium* are found in Japan and in the northeastern section of our continent, while they are not found in the range between? What is the reason for this gap?

To answer this question it would be necessary to enter into details and also to indulge in some guesswork. To return to lindens, for example, I may point out that lindens were at one time abundant in Alaska and in the west. This is proved by findings of imprints of linden leaves and fruits embedded in the rocks that once upon a time were soft sands in some western river or lake bed. *Tilia* is not found today in those regions, the inference being that unfavorable local conditions, summer droughts in the majority of the cases, caused *tilia* to lose ground at first and later to die out altogether in the west.

Everyone who has cultivated lindens knows that these plants do not thrive if they cannot get moisture throughout the year and especially in summer. Few are those who happen to realize, however, that the unsatisfied need for summer water

seems to have had more than anything else to do with the disappearance of *tilia* from our west. Thus, a tale which is thousands upon thousands of years old teaches yet today that lindens cannot be planted to good advantage in places that are short of water during the hottest part of the year. Where are we to draw a line between practical knowledge, so-called, and pure scientific information? Can the reader answer this question in his turn?

To sum up from the history in the record, we may expect that the lindens of Asia are related in various measure to the lindens of Europe and of America. We may also suspect that throughout the length and breadth of China, particularly in the south of China, are living species of *tilia* that represent old forms, survivors from the great trek south, or native sons that never felt the urge to go north.

Both these expectations are proved to be correct by the existing record. It should be interesting to continue speaking of some peculiar Chinese lindens, but I may not further indulge in generalities and must return to cultivated Asiatic lindens. With the exception of *Tilia Tuan*, of which something has been said above, the commonly cultivated lindens of Asia fall in three groups, as follows:

(A) Lindens mostly peculiar to China—To this group belongs today one species only, *Tilia mongolica*. This is a peculiar linden with variable leaves, but mostly with leaves that are deeply jagged and lobed, thus resembling the leaf of *ampelopsis* and *vitis*. The fruit of *Tilia mongolica* is comparatively small and smooth. The texture of the leaf nears that of *Tilia rubra*, to which *Tilia mongolica* is probably not too far related.

(B) Lindens that resemble species of Europe—*Tilia japonica* and *Tilia amurensis* are near kin of *Tilia cordata*. They differ from the last-named species in having sharper teeth at the margin of the leaf. *Tilia japonica* has a peculiar bark, somewhat resembling the bark of the white elm, and flowers that carry an inner row of half-aborted petals (staminodes). *Tilia amurensis* often has no staminodes at all. It is clear that these three species belong to one affinity. *Tilia cordata* is probably a late migrant to Europe which has got where it is now found after traveling through northern Asia.

(C) Lindens that resemble species of America—The characters of the species of this group are not so sharply defined as those of the species of the other two groups. It includes silvery lindens that on the average are intermediate between the European *Tilia tomentosa* and the American *Tilia heterophylla*. *Tilia mandschurica* and *Tilia Oliveri* are closer to *Tilia tomentosa*; *Tilia Maximowicziana* and *Tilia Miqueliana* more nearly resemble *Tilia heterophylla*. Broadly speaking, the Chinese and Japanese silvery lindens have sharper teeth and rounder, smoother fruits than the European silvery species and varieties. By reason of these characters the Asiatic species deserve to be placed nearer to the bee tree than to *Tilia tomentosa*. *Tilia mongolica* usually has jagged and cut leaves. A tree that has the "cloak-and-apron" bud of *tilia* and suggests *Tilia cordata* though having much sharper teeth on the leaf and a looser habit may be suspected of being *Tilia japonica* or *Tilia amurensis*. Silvery lindens with comparatively small, coarse, thickly hairy leaves probably belong to any one of the four species named in group C.

BURN OFF CRAB GRASS.

The flame gun is just beginning to receive attention in its use to kill crab grass in lawns, without permanent injury to the rest of the lawn.

According to Joel P. Barnes, of Barnes Bros. Nursery Co., Yalesville, Conn., the best time to use the flame gun for this purpose is in August at about the time the crab grass seeds are ready to fall. The whole area which is infested is burned over with the flame, so that the seeds which are on top of the ground are killed. This procedure at the same time burns the lawn, but it will re-establish itself within a short time. Mr. Barnes also recommends the application of a good lawn fertilizer after the burning, to help the grass re-establish itself.

The method suggested by Arthur G. Frost, Paragon Landscape Service, Cressville, N. J., closely parallels Mr. Barnes' method, with the exception that Mr. Frost recommends the application of a quick-acting fertilizer at about the time the grass is ready to produce seeds and then allowing the grass to reach a height of about six to eight inches, at which time the blades, because of the vigorous

growth produced by the fertilizer, will be standing upright trying to obtain as much sunlight as possible. After this growth has appeared, the flame gun is used to scorch off all vegetation. The grass will soon reappear, while the crab grass seeds are killed.

In testing the effectiveness of the flame gun, Mr. Frost selected a patch of lawn about two feet square and completely burned off all vegetation in August of last year. Today the patch is a mass of vigorously growing creeping bent entirely free of crab grass.

WHITE LINDEN MOTH.

An outbreak of snow-white linden moth of unequalled proportions has been reported in Connecticut by W. E. Britton, state entomologist. So numerous are the caterpillars that one section of approximately 250 acres of hardwood trees is completely stripped of leaves.

The infestation is so heavy that when state entomologists visited the scene their progress was impeded by the many hanging webs of the cocoons which were in a pupal stage.

The trees mainly infested are red maple, oak, American hornbeam, white ash and yellow birch, while tulip poplars and pines in the vicinity are untouched.

The present plague is not expected to cause permanent damage to the trees, as the stripping was done early in the season and the trees will probably leaf out again. Spraying with lead arsenate while the larvae are feeding has been recommended as a control measure.

This is the first known outbreak of the moth in Connecticut, although other similar incidents have been recorded in New York and Vermont.

SHOW DRAWS CUSTOMERS.

[Concluded from page 6.]

In connection with this nursery is a 10-acre area of woods, a portion of which has been developed into a picnic grounds. This is offered free for the use of customers, garden clubs and organizations of various sorts. This results in many direct sales—certainly it popularizes the nursery and results in many indirect ones. Such a feature is well worth adoption by any nursery which finds it at all possible, says Mr. Tuschinsky.

New and Uncommon Perennials

First in a Series of Articles on New Plants Particularly Profitable Because of Showy Character, Easy Culture and Long Blooming Habit—By C. W. Wood

Gardeners, being human, are ever on the lookout for something new. Having normal earthly desires, they usually want their new plants to be showy. It follows, then, that a showy new plant is good property in a nursery, especially one which depends on local sales for its outlet. For these reasons a neighborhood nursery can nearly always rely on a showy, new plant's being a money-maker, the length of time that it remains in that class depending on its other good traits.

To be highly popular over a long period of time, a plant must, of course, have other good qualities in addition to mere showiness. The most important of these is, I believe, ease of culture. The ubiquitous *Cheiranthus Allionii* is a case in point. Even in communities where it is overdone—and they are numerous—this plant still remains one of the bread-and-butter items of most local growers, merely because it is showy and easily grown. The fact that it has to be replaced yearly adds, to be sure, to its value from the nurseryman's standpoint. If a long blooming habit can be added to the foregoing, one has a plant really of marketable value.

Plants which possess the foregoing characters cannot be ignored by any grower regardless of his outlets. They are few in number, however, and a new one of the class seldom comes along; so we have to look carefully for others which are able to fill particular niches in garden schemes, such as accent, carpeting or cut flower plants, to have a well rounded list of material. It will be the purpose of the next few articles in this department to draw attention to some plants which possess, in some degree at least, the qualities mentioned in the foregoing. The observations on growth habits, garden behavior, propagation, hardiness and other matters which are apt to affect the plants' value are based, unless it is otherwise stated, on my own personal experiences; I garden in latitude 45 degrees north, where temperatures go down to 35 degrees below zero. I shall follow no definite plan of presentation, but select the different plants as they come to mind.

One of the most important perennials of recent introduction came from Carl Frikart in Switzerland several years ago as *Aster Frikarti*, Wonder of Staefa, the latter name being variously spelled. It has most of the desirable qualities outlined at the beginning of these notes, including a long blooming season, showiness and comparative ease of culture. The blooming season here covers the entire summer, the flowers being produced not sparingly, but abundantly, throughout the long period if the plants are not allowed to suffer for moisture. The lavender blue flowers are up to two and one-half inches across and are produced on long stems, making them ideal for cutting and adding another desirable character to an already richly endowed plant. All of this makes for a plant of vast possibilities, provided it is correctly handled.

Experience here tells me it is not quite hardy enough for permanence this far north, although it goes through the average winter even here in protected places. Its limit of endurance is unknown to me and can only be determined by trial. It does well in partial shade, but reaches its maximum of beauty and usefulness in full sunlight where it is assured sufficient moisture to maintain its long performance. Commercial propagation is from cuttings. Personally, best results have followed early spring propagation, though it is not at all unlikely that propagation under glass in winter would be even better. Here is a plant that should make money for all local dealers where it is hardy.

While on the subject of asters it may be well to mention a few of the newer kinds which have appealed to me as holding more than the ordinary amount of promise as profit-makers for local sales. It will not be necessary to go into details regarding the Michaelmas daisies, but I should like to mention three or four that you will need to complete your list. In the *novæ-angliæ* section, Mount Rainier is easily the best thing that I have seen, its large, pure white flowers, made up of narrow petals surrounding a yellow center, making

a plant of much charm and usefulness. The *novi-belgii* section presents a number of outstanding things among the newer offerings, Mount Everest, with snow-white asters completely covering its 4-foot pyramidal growth during September and October; Harrington's Pink, with really pink flowers on 3-foot to 4-foot plants commencing in September, and Burbank's Charming, with clouds of delicate pink flowers on 5-foot plants during October and November, being the top-notch kinds in their color classes so far as experience here goes. It should be mentioned, however, that the last-named is a little too late for my latitude, where severe frost usually puts an end to all asters by the middle of October. These Michaelmas daisies are easily multiplied by division, preferably in spring, and may be more rapidly increased by means of cuttings, which root easily under glass.

The new dwarf hybrid asters are still in heavy demand and will no doubt be money-makers for years to come, especially if breeders give us distinctive colors. So far I have been unable to get enthusiastic about the so-called pinks and lavenders, the colors being not clear enough to make a good impression. The variety Snow Sprite seems, however, to have most of the good points looked for in an edging plant for September and October bloom. Its height of twelve inches and compact growth make a pleasing plant, especially when covered with its semidouble white flowers. Division in early spring will take care of all normal demands.

Before closing the aster section, I should like to mention one more, Campbell's Pink, which I believe is headed toward popularity. In every respect, at least superficially, except its 15-inch stature and bright pink flowers, it is similar to *Aster acris*, a southern European plant. As most growers know, the latter grows as high as three feet, though normally it is not over two feet, and has large, blue flowers. One sees a variety nanus mentioned as growing fifteen inches high, and this may be a pink-flowered form, or it may be a hybrid with

acris as one parent. In any case it is a splendid plant, producing a pleasing picture in the garden from August until late September. It is propagated by division or from cuttings in spring and easily grown in a sunny, well drained situation.

The advent of pure yellow gailardias has given a mighty impetus to the forward march of these useful plants. Here is another item that possesses about all the qualities of the perfect flower, except that some of them are rather tender to extreme cold. I find the variety Sun God in that class, but Mr. Sherbrook has so far stood up under all abuse to which it has been subjected. Both kinds are superb garden plants, blooming from early summer until frost, and are of great value for cutting. In fact, it will pay any grower who has an outlet, either retail or wholesale, to investigate these yellow blanket flowers. I know a grower close to 200 miles from his market who is making a good profit from these flowers. Aside from the greater vitality of Mr. Sherbrook, there is not much on which to make a choice between the two varieties unless one can choose between the rich gold of Mr. Sherbrook and the soft yellow of Sun God. If an all-red variety is desired, I know of nothing better than Ruby. In its flowers no trace of color other than ruby red is found, there being no hint of yellow or brown, as in so many so-called reds, and only a slight deepening of the shade as the center is approached. It is splendid in every way.

As named varieties of gailardia do not come true from seeds, we have to resort to vegetative reproduction, than which nothing is easier of accomplishment. Everyone knows the spreading propensity of these plants—a character that makes division an easy matter. But that is too slow to answer the call for rapid increase; so we resort to root cuttings. These are made in early spring, by cutting the roots, even to the smallest if one is working for the greatest possible number of plants, into inch lengths or longer and planting them upright in furrows directly in frames or in flats under glass. Cover them with about a quarter-inch of soil and keep fairly moist until the plants are ready to line out. The number of plants one can get from a clump of gailardia by means of root cuttings is almost unbelievable.

An everblooming sweet violet is almost inconceivable, but judging from the performance of Rohrsbachs Perpetual, or *Viola odorata semperflorens*, during its first season here, it has at last arrived. It has the small leaves of Double Russian, the size of flower of Rosina, an abundance of blooms during spring and autumn like the latter, a moderate number of blue flowers all summer long—which is something no other sweet violet accomplishes—and a fragrance as heavenly as the best. All these illustrious qualities will surely create an immense demand for this everblooming violet. It is not poor advice, I believe, to urge all neighborhood growers to get a stock of it and be prepared for the business that will come when the plant becomes known. It is easily increased by division of the mats as formed by hardy sweet violets or from cuttings of the runners as made.

Campanula persicifolia Telham Beauty is not new, but after looking over plants in many nurseries under that label I am convinced that the true plant is not plentiful. It is quite evident that these conditions are the result of growing the plants from seeds. So far as I can determine, and I have tried ever since seeds of Telham Beauty have been advertised, this variety does not come true by that method of propagation and must be reproduced vegetatively. It is the most spectacular peach-leaved bellflower that I have ever grown, a showing of the plant in bloom being all that is necessary to make sales. It is more robust than ordinary forms of *C. persicifolia*, with flowering stems three feet tall—taller under extra-good culture—and the shallow cup-shaped blue blooms are simply immense in size. It is propagated by division soon after flowering, or from cuttings of new growths pulled away with a heel in early spring, the former being preferred by most growers.

PEACH VIRUS EXPERIMENT.

Results of experiments to determine the contact periods in graft transmission of peach viruses are reported by L. O. Kunkel in the July issue of *Phytopathology*.

The method used in the experiments was to insert diseased buds in the stems of healthy trees and leave them for different periods of time,

after which the buds were removed with all adhering tissue. Potted seedling peach trees of about the same size and vigor were used in the experiments. The ages varied from 6 months to 2 years, but trees of the same ages were used in similar experiments.

The results showed that mosaic virus usually passed into the healthy tree after two to three days of contact. Viruses causing yellows, little peach and rosette passed into the tree after eight to fourteen days.

It is thought, by the experimenter, that some inherent property in the mosaic virus may account for the short contact period required for its transmission.

HARDY HAWTHORNS.

The *crataegus* family, hawthorns, contains a number of hardy and ornamental shrubs that have been so far neglected to a great extent by western nurserymen, writes F. L. Skinner, of Dropmore, Manitoba, in *Dakota Horticulture*. Possibly the reason for this is that seeds are rather slow to germinate.

The following species he mentions as quite hardy and giving variety in fruit, foliage and habit.

C. erythropoda, the chocolate thorn, has glossy foliage, glossy red brown twigs and chocolate-colored fruits. This is a spreading shrub eight or ten feet high.

C. chlorosarca, a small tree of more pyramidal habit than the other varieties, has large leaves of a dark green color and stout brown purple twigs. The glossy black fruits are probably more ornamental than those on any other black-berried shrub. This attractive ornamental is a native of Manchuria.

C. altaica has bright yellow fruits and quite finely cut foliage. This is a spreading shrub six to eight feet high, native to the Altai mountains of Mongolia.

C. succulenta, from near Lake Superior, resembles the scarlet haw to a certain extent, but the growth is stiff and upright. The fruits are quite large and of a bright scarlet color.

C. sanguinea, from Manchuria, is one of the largest-growing of the hardy hawthorns, becoming a small tree up to twenty feet high and spreading to about fifteen feet across. The red fruits turn quite soft as they ripen.

Southern California Leaders

Officers Elected at Meeting of Horticultural Institute, Companion Organization of Horticultural Industries, Inc., Active Trade Body in the Los Angeles Area

The newly elected officers of the Southern California Horticultural Institute began their regime under President Lovell Swisher with the July meeting at the Mayfair hotel, Los Angeles, honoring the retiring president, Manfred Meyberg, president of the Germain Seed & Plant Co. Roy Wilcox, a past president, presented to Mr. Meyberg, on behalf of the members of the institute, an embossed scroll, hand lettered and decorated in nine colors on a parchment replica of the institute's letterhead. This set forth the accomplishments of Mr. Meyberg's term of office; namely, the creation of an active plant forum, the creation of a landscape architecture course in the public schools, the organization of a speakers' bureau and the publication of "Your Garden" by the Los Angeles bureau of water and power. Mr. Wilcox made a witty speech, with good-humored references to Mr. Meyberg's penchant for boosting the seed business.

Mrs. Opal Scarborough, representing the speakers' bureau, tendered to Mr. Meyberg a gold-embossed billfold.

The speaker of the evening was Mrs. Guadalupe McDonald, of the famous McDonald Dahlia Gardens, at Bellflower. She spoke interestingly of her work in developing numerous strains of commercial value and showed a magnificent display of pompon, petite, miniature, ball, cactus and decorative types. Floral arrangements

were artistically handled by Richard Westcott, of Paul J. Howard's Horticultural Establishment, and Russell Jones, of Halchester's Flowers.

The horticultural forum, directed by Mrs. Scarborough, made an interesting showing. Henry Murrieta, of the department of water and power, won first place with his cactus; second place went to Lloyd Cosper, Pasadena, for his streptocarpus, and third to Carl Hagenburger, Santa Monica, for his ivy. Lou W. Johnson, secretary of the institute, displayed a nephthytis plant which has been thriving for some months in his office, under conditions not the best for its health, as an example of an excellent plant to be recommended for use in offices and other indoor locations. The plant was originally the gift of Carl Hagenburger.

The newly elected officers of the institute are: President, Lovell Swisher, Jr., Hillside Gardens; vice-president, Murray C. McNeil, Swift & Co.; treasurer, W. B. Early, Aggeler-Musser Seed Co. Directors are: J. A. Armstrong, Armstrong Nurseries; John C. Bodger, Bodger Seeds, Ltd.; Hugh Evans, Evans & Reeves Nursery; Carl Hagenburger, Hagenburger Specimen Plant Gardens; Paul J. Howard, Paul J. Howard's Horticultural Establishment; L. B. Merrick, L. B. Merrick Nurseries; Manfred Meyberg, Germain Seed & Plant Co.; A. Pastor, A. Pastor Nursery; H. J. Scherer, nursery representative; Edward E. Spence, Beverly Hills Nurseries; L. Virgil Wadsworth, Peck & Wadsworth; Roy F. Wilcox, Roy F. Wilcox & Co.

Secretary Johnson announces that the garden leaflet sent out by the Los Angeles bureau of water and power has received enthusiastic acceptance from the public and much favorable mention by the trade. The September issue will carry, in the masthead, the emblematic seal of the bureau of water and the newly designed emblem of the Horticultural Institute, beneath which will be carried the words, "Buy where you see this sign." Emblems, 12x12 inches, printed in blue, black and gold on book paper, neatly framed for per-

manent use, will be loaned to nurserymen, seedsmen and allied dealers in good standing, with a property charge of \$1 for each framed emblem loaned. They will be furnished in quantities required, and cuts in various sizes will also be available at cost for use on stationery and in advertising.

CALIFORNIA LEADERS.

Organized in dual form, nurserymen in Los Angeles and vicinity make public contact and perform promotional work for the industry through the Southern California Horticultural Institute, in which seedsmen also are active. Within the trade works Horticultural Industries, Inc., having the same treasurer and secretary as the institute, but different president, vice-president and board of directors.

Manfred Meyberg, president of the Germain Seed & Plant Co., Los Angeles, now retiring as president of the Southern California Horticultural Institute, served as its first vice-president, when the institute was organized, with Roy F. Wilcox as its first president. Mr. Meyberg is a native of Los Angeles. He began working for the Germain Seed & Plant Co. at the age of 18 and has been there continuously for thirty-four years. He is a past president of Pacific States Seedsmen's Association. He says that the nursery industry has progressed faster during the last few years than during the fifteen years preceding, because nurserymen,



Murray Charles McNeil.



Lovell Swisher.

through the education of the gardening public, have themselves become educated to better ways of doing business.

Lovell Swisher, recently elected president after a term as vice-president, is owner of the Hillside Gardens, Hollywood. He was born at Iowa City, Ia., migrating to California thirty years ago. He was educated at the University of Iowa and went into the bond business and later joined the Northwestern Mutual Life Insurance Co., with which he is still connected. He engaged in gardening as an avocation and has done much experimental work with outdoor orchids, strelitzias and other rare flowers. He exhibited in flower shows first as an amateur; then his interest led him to become manager of such events. He managed three Bel-Air flower shows, several Pasadena events and the Los Angeles show of 1936.

Murray Charles McNeil, new vice-president, was born at Clinton, Ontario, Canada, May 15, 1901. He went to California in 1919 and received his training at the Armstrong Nurseries, Ontario, Cal. He is well known to many nurserymen, having traveled extensively in developing wholesale business for the Armstrong Nurseries. He pioneered their landscape department. In 1931 he installed the roof garden nursery at the May Co., Los Angeles, the first project of its kind in America, converting waste space in a department store into a profitable business venture. During his three years as manager, he organized the Los Angeles Garden Club. In 1934 he joined the staff of Swift & Co. fertilizer works.

Harold McFaddan, president of Horticultural Industries, Inc., was

born August 29, 1900, in Atchison county, Kan. After many years as a newspaper reporter and editor and as advertising agency executive, he took over the job of managing the Del Amo Nurseries, at Compton, in January, 1936. These nurseries are owned by one of the early California families. As president of Horticultural Industries, Inc., he has some misgivings as to the success of the job, because nurserymen are not so familiar with organization cooperation as are the leaders in other industries. Says Mr. McFaddan, "I feel that the nursery business is the greatest industry in the world, contributing more to pleasure in living than probably any other endeavor. In spite of having my advertising and merchandising ideas knocked into a cocked hat since being in this business, I feel that we have not even scratched the edge of the possible market for plants. I am convinced that with proper organization the nursery business can increase its business a hundredfold."

Harry A. Marks, vice-president of Horticultural Industries, Inc., was born at Kalamazoo, Mich., in 1889. Shortly after his birth, his family moved to Chicago, where he remained until 1913, when he went to California, settling in Los Angeles. He was educated in the Chicago grade and high schools and attended the University of Wisconsin, from which he graduated in 1913. In Los Angeles, Mr. Marks took a position with the Germain Seed & Plant Co. and is at present advertising, retail store and nursery manager. He has been with that company since 1913 except for three years spent in Chicago from 1927 to 1930 for C. R. Burr & Co., Manchester, Conn. He has been president of the Southern California Nurserymen's Association and the California Association of Nurserymen.

W. B. Early, treasurer of both the Southern California Horticultural Institute and Horticultural Industries, Inc., since their organization, is president of the Aggeler & Musser Seed Co., Los Angeles. He was born on a farm in Humboldt county, Cal. He became associated with the Aggeler & Musser Seed Co. in 1906, was secretary-treasurer until 1924 and vice-president until 1929 and has been president since that time. He was active in organizing the Pacific States Seedsmen's Association in 1926 and served as president of that

organization in 1928. He has been active in the California Seed Council, of which he also was president.

Lou W. Johnson, secretary of the two organizations shows his capacity in these autobiographical notes:

"The modest subject of this sketch was born quite some time ago in the effete east. At the early age of six weeks he took his parents by the hand and led them out to Peabody, Marion county, Kan. There his father practiced law and Lou practiced on the clarinet. By the time he was 12 he had been expelled from the public school and was playing in a circus band. This went on for a number of seasons, with the hibernating winter months spent at the University of Kansas, where he promoted a degree of LL.B. Then he went to St. Joseph, Mo., for a legal experience, which lasted 365 days. When he took the annual inventory he was \$3 in the hole; so he joined a circus and subsequently became interested in the business management of a number of tent shows. Returning to the law at Pittsburg, Kan., he became interested in civic organizations and was nearly ruined financially by being appointed postmaster. In 1920 he sold his post office and moved to Wilmington, Cal., where he handled the chamber of commerce until 1926, moving then to Hollywood and engaging in varied public relations contacts. He is married, having two children and one dog, Sprinkle, whose ambition is to visit nurseries."

TALK TO STATE OFFICIALS.

Roy Wilcox, of Roy F. Wilcox & Co., Montebello, past president of the Southern California Horticultural Institute, addressed the members of the



Manfred Meyberg.



W. B. Early.



H. A. Marks.

Institute of Government, at the University of Southern California, in its deliberations and discussions on the subject of park administration. He said, in part:

"There are more than 3,000 licensed growers and venders of nursery plants and cut flowers in California. It is estimated that the total annual turnover of these concerns is about \$45,000,000; of this sum \$20,000,000 is allotted to economic and ornamental nursery stock. A federal census for 1935 stated that the retail florists' stores in California did a gross turnover of \$7,000,000 for that year and that the export trade in cut flowers is at present \$8,000,000 per year.

"One of the ways and means for increasing production and greater consumption is that municipal, county, state and federal governments cease operating nurseries. That which creates governmental competition with individual enterprise constitutes an unjust burden on the taxpayer, because it is an interference with private industry, curtailing production and private earnings. Hence, government in the nursery business is to be deprecated because it is an interference to individual initiative and therefore unsound, and because it is based on false premises, i.e., that trees and plants can be produced more economically under governmental supervision than by private enterprise; to the contrary, skill and ability when tintured with the ways of politics is inefficient. The results are waste and incompetence, a condition largely responsible for unbalanced budgets. Nurserymen throughout the country are firmly of the

opinion that government has no business in the nursery business.

"In this connection, government nurseries often make the criticism that the supplies required in public plantings are unavailable in private concerns, which statement calls for a qualification. Obviously no nurseryman would grow particular stocks in large quantities unless assured of a market. Many nurseries have the land, equipment and organization to produce stock in large blocks (100,000 to 1,000,000) and are ready to enter into contracts with government authority to grow such supplies as may be required. Let the state, county and municipal governments contact the leading nurseries, explain their requirements and enter into negotiations in advance for the growing of stocks to meet particular conditions of soil, climate and purpose. This will establish an open market, support the taxpayers and produce the plant requirements required on a more economical basis.

"It is not generally known, but the California Association of Nurserymen has been active for nearly a third of a century in seeking wider markets and better distribution for all classes of plant material possessing commercial rank. Its members have been constant in endeavoring to create a healthy civic pride for the creation of public plantings along lines of permanence and beautiful home surroundings; the horticulture of California is an evidence that their efforts have not been in vain.

"It is safe to say that for informative values and reliability, the trade's sales literature is second to that of no other state; indeed, the catalogues of some of our leading growers are used as textbooks in the public schools



Harold McFadden.

and as sources of reference by thousands of amateur plant lovers. When to these considerations we add the many practical instructions covering planting, cultivating, fertilizing, pruning, irrigating, injurious insects and diseases the educational influence wielded by the industry is an important factor in stimulating public and private planting. As an industry, we stand ready and anxious to coöperate with all other groups in providing ways and means to render the public at large plant and garden conscious.

"About a decade ago the state association sponsored legislation that created the California Bureau of Nursery Service, administered by the department of agriculture, and some five years ago, it formulated a system of grades and standards covering all classes of nursery stock, which was enacted into law at the 1937 session of the legislature and is now in operation. Avoiding legal phraseology, the aim of the statute is to eliminate the unfit in nursery stock from sale. To secure the observance of the law, the purchasers of plant material should insist on stock that will qualify. As an educational feature, you university people and government officials will appreciate the provision in the law that makes it obligatory on the part of the vender that plants be accurately labeled.

"Arbor day, planting week, the anniversary of Luther Burbank's birthday and the planting of botanical gardens are all state functions that provide splendid opportunities between nurserymen, municipal and private planters. By all means let us coöperate to secure an expansion of our glorious horticulture." M. L.



Lou W. Johnson.

Southern Convention

*Good Attendance and Live Program Features
of Fortieth Annual Meeting, Held at Atlanta*

Approximately 100 attended the fortieth convention of the Southern Nurserymen's Association, August 10 and 11, at the Atlanta Biltmore hotel, Atlanta, Ga.

After the first business session was called to order by the president, Charles M. Smith, Concord, Ga., the invocation was given by Rev. H. C. Hale, Atlanta.

The nurserymen were welcomed to Atlanta by Kendall Weisiger, of the Southern Bell Telephone & Telegraph Co. The response was made by Harry B. Chase, of the Chase Nursery Co., Chase, Ala. Mr. Chase spoke of his first visit to Atlanta and then asked how many had attended the meeting thirty years ago. There were only eight present who had.

The report of the committee on arrangements was given by W. L. Monroe, of Monroe's Landscape & Nursery Co., Atlanta, general chairman. Donald Hastings, Atlanta, was program chairman.

This was followed by the president's address, a constructive presentation of current opportunities for nurserymen.

C. A. Cobb, president of the Southern Ruralist, spoke on "Better Sales with Better Sales Literature." He assured the nurserymen that they have a greater field for advertising than almost any other group today and asserted their competitors are not just their fellow nurserymen, but the whole field of industry.

Z. L. Scott, Concord, Ga., gave an instructive talk on "Modern Culture of Muscadines and Scuppernongs."

Davenport Guerry, Macon, Ga., talked on "Unfair Trade Practices."

A. A. N. Activities.

Possibly the outstanding address was that by R. P. White, Washington, D. C., secretary of the American Association of Nurserymen. He stressed two points, the opportunity to protect the market and the opportunity to promote the market. This can only be done through the association, he stated.

"Government competition with private enterprise for a regulatory or other purpose, whether instructive or not, is unjustifiable, and the invasion in fields of nursery stock production by local, state or federal governments constitutes one of the greatest threats to the nursery industry today."

Speaking on the promotion of the market, he stated that for every part of the country to have its greatest opportunity for development and advancement of industry and agriculture it must have the fullest possible access to all parts of the domestic market. He commended the activities of the trade barriers committee instituted by the Southern Nurserymen's Association last winter.

At 3 p.m. everyone went to Grant park to view the cyclorama and to enjoy at 6:30 a barbecue arranged by Ed. Wachendorf, who had charge of entertainment of guests. Later in the evening there was a barn dance at the new garden clubhouse of Monroe's Landscape & Nursery Co.

Thursday Session.

At Thursday morning's session, T. J. Ross, of the Railway Express Agency,

spoke on "Modern Express Transportation." He stated that nurserymen are the most painstaking people with which the express company comes in contact, that the hardest work done by the express company is to unload baled trees and shrubs, but they feel more than compensated with the care taken by nurserymen in packing them. Optimistically he declared that business is on the upgrade, that the express business has improved from eighteen to twenty per cent lately.

Lee McClain, in his talk on "Government and the Nursery Trade," followed up what had been said on Wednesday by R. P. White. He urged wholehearted support of the American Association of Nurserymen. He presented resolutions adopted by the executive committee of the National Plant Board and the A. A. N. trade barriers committee. He stated that the National Plant Board had only one request to make of nurserymen and that is not to sell nursery stock at wholesale to any but a qualified, licensed dealer. His resolutions were adopted.

Billings Murphy, from the state entomologist's office, showed movies and gave a talk on "Seriousness of New Insect Pests to the South." Donald Hastings reported that the Georgia legislature had recently appropriated \$100,000 to help stamp out the white-fringed beetle in the state and this appropriation was secured through the efforts of the Georgia Nurserymen's Association.

Mr. McGregor, Mobile, Ala., showed

colored slides of the beautiful Bell-grath gardens, near that city, and of camellias, azaleas and amaryllis.

W. L. Monroe urged an educational program for all members of the association, and Charles M. Smith, president, appointed Mr. Monroe chairman of a committee of five to consider this matter.

The meeting next year will be held at Huntsville, Ala., August 16 and 17.

New officers elected were: President, J. Y. Killian, Newton, N. C.; vice-president, J. B. Wight, Cairo, Ga.; secretary and treasurer, W. C. Daniels, Charlotte, N. C. Walter Hillenmeyer, Jr., Lexington, Ky., was made chairman of the executive committee. R. G. L.

VIRGINIA MEETING.

Members and guests began to assemble Sunday, July 31, for the annual meeting of the Virginia Nurserymen's Association, at the Virginia Polytechnic Institute, Blacksburg. Committee meetings and an informal get-together, at which Mr. Bennett, of Greenbrier Farms Nursery, showed moving pictures and colored lantern slides, took place Sunday evening.

Monday morning, about fifty nurserymen and their guests were present at the meeting. Dean H. L. Price, of the department of horticulture, welcomed the group to the college and told of the important part that the Virginia and other nurserymen had taken in the development of the commercial apple and peach orchards in the state.

President R. G. Burnet outlined the year's activities of the various committees and urged the necessity for still greater activity of leadership by these committees during the coming year. The president's recommendations

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SEEDLING PEACH. Screened.

1 to 9 bus.	\$2.80 per bu.
10 to 24 bus.	2.70 per bu.
25 to 49 bus.	2.60 per bu.
50 bus. and up.	2.50 per bu.

LARGE OR BUDDED SEED

1 to 9 bus.	\$1.40 per bu.
10 to 24 bus.	1.35 per bu.
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50 bus. and up.	1.25 per bu.

Send us your want list on NATIVE TREE, SHRUB OR VINE SEEDS for special quotations. Also quote us prices on any surplus seeds you may have to offer.

Write for a copy of our Fall Trade List on Nursery Stock and send your want list for special quotations before you buy.

were referred to the executive committee for consideration and action.

Prof. A. B. Massie, of the department of botany, emphasized the distinguishing characteristics of several coniferous evergreens, stressing particularly the character of the leaves and leaf scars.

The theme of the meeting was merchandising, the feeling being that there is little trouble in propagating and the real problem of nurserymen being selling the stock that they grow.

W. P. Hazelgrove, Roanoke attorney, considered his subject from the standpoint of the customer, pointing out that if the nurseryman is to succeed for long he must sell with the necessary information as to what each customer needs. He must tell the facts and give sound instructions as to the landscaping and adaptability of plants sold. It is essential to satisfy the customer by selling him stock that with good care will last through the years.

Dr. F. B. Hutcheson, head of the department of agronomy, gave some excellent advice on soil management. He emphasized particularly the use of legumes to improve the soil and insisted that the legumes need phosphorus and potash if they are to build up a satisfactory crop to plow under.

Albert Glass, Altavista, gave a sound talk on growing plants that are likely to be in demand rather than just growing nursery stock and more nursery stock, regardless of its probable utility.

The final afternoon talk, by Prof. A. H. Teske, developed into an open discussion of insects and diseases of nursery stock. Most of the nurserymen present took part in the active discussion which led to the adoption of a foundation for a spray program, to be released later by the extension division of the college.

Among those participating in the discussion were several V. P. I. specialists, including Dr. W. J. Schoene, entomologist; G. W. Underhill, associate entomologist; Dr. R. G. Henderson, pathologist, and Dr. G. M. Shear, pathologist, as well as C. R. Willey, associate entomologist, state department of agriculture, Richmond. It was felt by the nurserymen present that the spray program, as developed under the direction of Professor Teske, will be helpful.

The ladies were entertained at tea by Mrs. A. G. Smith during the afternoon, and Prof. A. G. Smith, Jr., showed the group through his rose plots, which were in excellent condition.

In the evening, Philip Gott, of the

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Evergreen Shrubs
Roses
Small Fruits
Hardy Perennials
Greenhouse and
Bedding Plants
Bulbs and Tubers
SEEDS

Complete Nursery Supply

The Storrs & Harrison Company
PAINESVILLE, OHIO

United States Chamber of Commerce, talked on the theme of the meeting, "A Sound Merchandising Policy."

Tuesday morning, Richard P. White, executive secretary of the A. A. N., talked on "Organization and Its Relation to Merchandising" Owen G. Wood reported on the Virginia chapter.

Officers elected by the association for the ensuing year were: H. B. Wharton,

Roanoke, president; J. O. Williams, Richmond, vice-president, and G. T. French, Richmond, secretary-treasurer.

It was decided to hold a winter meeting at Richmond in January and the next summer meeting again at Blacksburg, August 1 to 3, 1939. The general theme of the discussions for the coming year will be landscape problems. G. T. French, Sec'y.



At Annual Meeting of Virginia Nurserymen's Association at Virginia Polytechnic Institute, Blacksburg.

Big Gain for Michigan

*Report Membership Quadrupled at
State Association Meeting at Lansing*

In spite of threatening weather and rain in the eastern portion of the state, forty or fifty nurserymen gathered at the Hotel Olds, Lansing, August 10, for the summer meeting of the Michigan Association of Nurserymen. The invitation to bring the wives met a fair response and was believed a good move.

Opening the afternoon program, Prof. B. A. Walpole, chairman of the committee of agriculture of the National Exchange Club, presented a gloomy picture of agriculture in this country because of government attempts at regulation. In his entertaining talk he offered some suggestions for the promotion of the nursery business. He thought an advertising appeal might be based on the medical profession's advice to get plenty of outdoor air and sunshine for the cure and prevention of many ailments, for the planting and cultivation of gardens should be a means to that end. He recommended an educational campaign to make the general run of customers more familiar with the differing types of plants and the particular adaptability of each. He recommended the personal appearance of nurserymen at the meetings of garden clubs and horticultural societies in order to create a closer bond between amateur and professional horticulturists. He emphasized the necessity of alertness to state and national legislation to prevent the encroachments of government bureaus on the industry.

Walter Milliman, personnel director of the Wolverine Shoe & Tanning Corp., told of his company's effort to tie the employees closely to the organization by the promotion of their interests, including the ownership of homes and their planting. Part of the company's program is that each employee have an acre of ground and cultivate it. To promote interest in gardening, collections of plants and shrubs were offered each year. Out of 800 employees, last season 450 bought one or more of three collections, ranging in price from 50 cents to \$1. While these orders are small, he insisted that the aggregate of such business is large enough to be important. He urged that nurserymen pay more attention to the small buyers, so as to develop a greater number of them.

Reporting on the progress of the association in consequence of the membership drive, Harold Paul traced the history of the organization since it was organized in 1922, with twenty-four members. After increasing to about thirty-five, the membership dropped again until there were only twenty-six a year and one-half ago. Through the personal efforts of the officers and the membership committee, who have called on most of the nurserymen of the state, the roster has been increased to over 100, representing about eighty per cent of the acreage in the state.

Dr. V. R. Gardner, head of the department of horticulture at Michigan State College, was called upon. His response was the development of an idea that nurserymen might interest as customers those persons who look forward to retiring in their declining days. He

referred to, but declined to name, two towns in Michigan which had attracted the attention of such persons because of the horticultural atmosphere of the places. He believed other communities could be dressed up similarly. Replacement business, he asserted, was overlooked by most nurserymen, and he asserted that many orders of \$50 and \$100 were to be had almost for the asking.

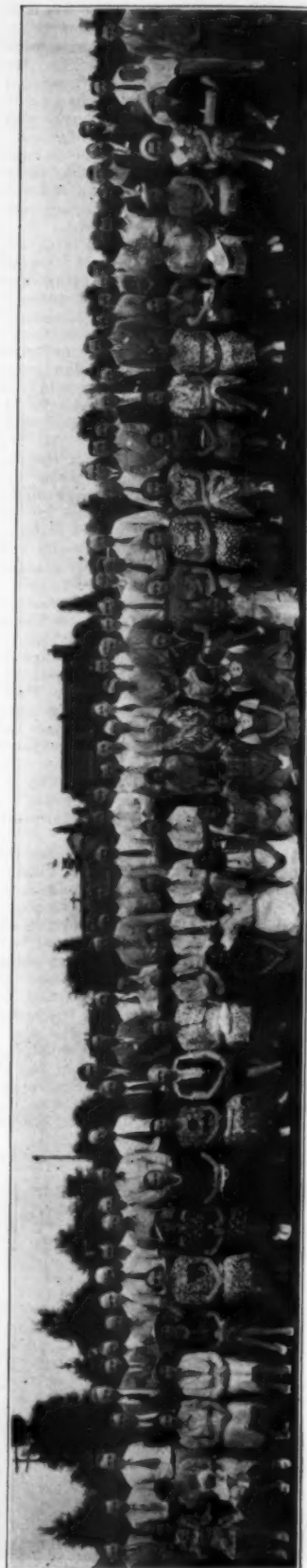
The banquet in the evening was made entertaining by Axel Christensen, humorous impersonator and clever pianist. Two youthful radio entertainers danced and sang. The singer was 12-year-old "Buddy" Brooks, whose father is associated with the Burgess Seed & Plant Co., Galesburg, Mich.

The following morning's session was opened by Eldon H. Burgess, of the Burgess Seed & Plant Co., who talked on "New and Worth-while Perennials." Referring to the multitude of introductions annually from many sources, he said the reward was in the few that added novelty, interest and superior attraction to gardens. To the catalogue houses, particularly, these new introductions are important. His trial grounds receive hundreds of new things to test, in order to get a half-dozen or a dozen worth-while novelties each season. His comments on a few recent introductions led to a discussion of their merits. The troublesome duplication of names and the revival of old plants under new names came up for consideration as accompanying problems.

In the absence of Benjamin J. Greening, Walter Coon outlined the events of the A. A. N. convention at Detroit. Harold Paul dwelt on the value of membership in the national organization, and Harry Malter mentioned the work that had been done, his membership committee gaining thirteen Michigan members for the A. A. N. in the past year. F. R. Kilner, editor of the American Nurseryman, was asked to talk upon the current problems that face the industry and that make membership in the national association necessary for the individual nurseryman to protect his interests and to provide funds for the continuation of the Washington office.

E. C. Vandenberg, state inspector, spoke briefly in reference to the new white-fringed beetle, the lower catch of Japanese beetles in the state and the necessity for clarification of the inspection law. After some discussion of the last-named subject, Eldon H. Burgess moved that the legislative committee redraft the law and refer the changes in text to the executive committee. Another resolution was adopted, that the secretary write to the commissioner of agriculture to urge that a definite item for nursery and orchard work be included in the budget now in course of preparation.

Experiences in the workings of the social security law were presented by several members. The chief difficulty is in defining the exact line between agricultural labor and taxable labor. Several maintained that the packing and delivering of merchandise from the nursery in its own trucks should be in-



Group Picture Taken at Meeting of Indiana Nurserymen's Association, at Wiegand's Nurseries, Indianapolis, July 27.

cluded as exempt labor. Landscape planting is done by separate crews and such labor is not considered exempt.

President Arthur L. Watson asked the coöperation of members in furnishing news items for the monthly bulletin, which the secretary-treasurer, Harold E. Hunziker, has been issuing the past few months. Arthur Krill spoke briefly about his recent eastern trip, and Otto Katzenstein acknowledged greetings as the visitor from the most distant point, Atlanta, Ga.

INDIANA MIDSUMMER MEETING.

Threatening weather and a rainstorm in midafternoon failed to curtail much the attendance at the midsummer meeting of the Indiana Nurserymen's Association, at the nurseries of A. Wiegand Sons Co., 2600 Kessler boulevard, Indianapolis, July 27.

Visitors from other points in the state and some from out of the state arrived early in the afternoon to inspect the splendid array of specimen evergreens, many of large size, in the nurseries. A heavy storm drove everyone under cover, but the new packing shed, decorated with evergreens and furnished with chairs, made an excellent meeting place.

President Alex Tuschinsky gave a brief welcoming message and then introduced Prof. R. B. Hull, landscape extension specialist at Purdue University, who spoke interestingly. He was followed by Frank B. Wallace, state entomologist, whose remarks on pests of the current season brought a valuable discussion with some of his hearers.

After the minutes were read by Secretary Kenneth Randel, report of the executive committee's action was made by Merrill Esterline. Vernon H. Krider, for the membership committee, commented on the good increase in the past year, but thought considerably more could be done. Harry Hobbs, for the legislative committee, said a lien law was being proposed for nurserymen's protection. Report of the successful A. A. N. convention at Detroit was made by Ollie Hobbs, L. A. Pottenger and Merrill Esterline.

J. H. Lowry told of the gardens being planted at the Indiana School for Blind Children, wherein the subjects are labeled with metal tags in Braille, so that the children may be acquainted with growing things. The gardens now include 170 different shrubs, about 100 rock garden subjects and about 100 perennials. The plantings will be extended.

During the meeting the wives and children were entertained at the home of Homer L. Wiegand, where games were played and prizes awarded. A picnic supper had been arranged on the illuminated lawn, but was transferred to the packing shed when rain fell again. Door prizes consisted of everything from fertilizers and wild ducks to cash, being contributed by various members of the association.

After the picnic supper, moving pictures of the planting and grafting of roses were shown by J. H. Van Barneveld, Puente, Cal. Pictures of the rose festival and swimming pool at the Hillsdale Nursery Co., Indianapolis, were shown in color and explained by Alex Tuschinsky, the proprietor.

In all about 150 persons were present, including members, visitors, guests and

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	Per 10	Per 100
10 to 12 inches.....	\$4.00	\$35.00
12 to 15 inches.....	5.00	45.00
15 to 18 inches.....	7.50	70.00
18 to 24 inches.....	10.00	90.00
24 to 30 inches.....	12.50	120.00
30 to 36 inches.....	17.50	160.00

Old English—Dwarf Boxwood—BUXUS SUFFRUTICOSA

	Per 10	Per 100
8 to 10 inches.....	\$5.50	\$50.00
10 to 12 inches.....	6.50	60.00
12 to 15 inches.....	8.00	75.00
15 to 18 inches.....	11.00	100.00
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Shenandoah, Iowa

R. S. Lake
Sec.-Treas.

their families. A rousing vote of thanks was given at the conclusion of the meeting to the host, Vice-president Homer L. Wiegand, for his generous refreshments and the music, consisting of an 8-piece orchestra.

Demonstration of his hand projector for feeding shade trees was shown by Roy Gresham, Indianapolis.

DR. ZIMMERMAN ON TOUR.

Dr. P. W. Zimmerman, of the Boyce Thompson Institute for Plant Research, Yonkers, N. Y., is spending several weeks in Europe this summer to meet with leading plant hormone workers, particularly those who have been following the methods developed at the institute for the propagation of plants with Hormodin. He will also attend the twelfth International Horticultural Congress at Berlin, Germany, August 11 to 20.

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SPECIALIZING IN
TAXUS, AZALEAS, RHODODENDRONS

AND ODD ITEMS YOU' ARE UNABLE
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LOUIS G. DAVIS has succeeded Roy G. Richmond as Colorado state entomologist and head of the bureau of plant insect control, according to an announcement from W. C. Schweinhart, director of agriculture.

New Jersey Field Day

Plant Clinic Session Features Second Annual Nurserymen's Gathering at Rutgers University

The second New Jersey nurserymen's field day was held at the state college of agriculture, Rutgers University, July 26. After registration near the laboratory at the horticultural farm, Charles Hess, president of the New Jersey Association of Nurserymen, formally opened the meeting in the Log Cabin at 10:45 a. m. The presentation of a statement of appreciation to Willard H. Allen, state secretary of agriculture, came first on the program. Secretary Allen responded with a short address, outlining the story of the late winter and spring advertising campaign of the New Jersey council, with special reference to the use of the advertising fund for ornamental horticulture. The secretary predicted a boom in landscape beautification plantings, particularly in municipal parks and along parkways and roadsides, and he encouraged the New Jersey plantmen by reminding them that their business is admirably located for the largest metropolitan markets in the east. He also urged full cooperation with the department of conservation and development under Director C. P. Wilbur, in assisting the growing consciousness and appreciation of beautiful surroundings throughout the state. This effort is particularly necessary, Mr. Allen concluded, because of the inevitable destruction of and damage to many superb trees along New Jersey's highways in the development of these routes.

Dr. William H. Martin, director of research, welcomed the nurserymen and their guests. He assured them of a perpetual welcome at the state college of agriculture and experiment station, and he expressed the hope that the cooperation between the New Jersey Association of Nurserymen and the educational and research institutions would long continue. Dr. Martin went on to relate some of the research work being done.

Charles Hess, president of the New Jersey Association of Nurserymen, read a paper in which he gave a summary of the work of the association and its executive committees. He expressed a desire for a nursery short course at the state college and concluded with the hope that the horticultural trade in the state would work for a standardized system of grades for nursery stock regulated by statute.

Plant Clinic.

The remainder of the morning session was given over to a plant clinic conducted by Dr. C. C. Hamilton and Dr. P. P. Pirone. Insects and diseases affecting ornamentals at this season were given particular attention. Many specimens were brought to the meeting by nurserymen. The effect of the spread of European pine-shoot moth and its influence on the status of red pines as a type to be recommended were discussed. George Jennings reported that he has found applications of a fertilizer high in nitrogen helpful in combating the effects of maple wilt. Ammonium sulphate also gave good results.

For sphaeropsis tip-blight on Austrian pines, Dr. Pirone advised two

sprays of Bordeaux mixture, the first applied as the "candles" form and another application ten days later. Dead tips should be pruned out and burned. Fertilizing to build up the tree's vitality is the third step in tip-blight control.

For chlorosis of ornamental trees, a soil test to show the chemical balance is the first requisite. If interpretation of this report shows lack of soluble iron compounds in the soil and improper acidity—common causes of chlorosis—the trouble may be controlled by applying a mixture of ferrous sulphate and powdered sulphur in equal parts at the rate of one pound per inch of the tree's diameter.

By the time all the specimens on hand had been diagnosed it was time to give attention to the inner man, and a buffet lunch was served in the Log Cabin. After lunch a sprayer demonstration was staged at a near-by part of the farm, and the nurserymen visited points of special interest in the shrub collection and in the new ericaceous garden. This planting was started last autumn in an area of cleared dogwood and oak woods, with plants donated by nurserymen in the state. It is planned to extend the ericaceous garden considerably in the near future to make a display grounds where these valuable plants can be studied by students and by amateurs.

Business Session.

In the short business meeting of the New Jersey Association of Nurserymen, the first thing in the afternoon's program, President Hess brought up the discussion of a nursery short course at Rutgers. Dr. William H. Martin gave a tentative outline for consideration, suggesting a 3-day or week session in the winter season. Nursery management, salesmanship, insects, plant diseases, soils and propagation were discussed as courses to be considered.

In considering "Horticultural Topics" in its new form, President Hess asked for a discussion from the floor. The sentiment of the members was strongly



Three Generations at Meeting.

[Dr. W. H. Martin greets President Charles Hess, his son William and his father, Cornelius Hess, from The Hague, Holland.]

in favor of the new mimeographed news sheet without advertising. Lou Schubert, associate editor, stressed the need for every member to cooperate with Wallace S. Moreland, of the editorial office of the New Jersey extension service, who has taken over the editorship of the publication for the New Jersey Association of Nurserymen. It was moved and passed that "Horticultural Topics" be continued in its present form as the organ of the association.

Frank La Bar, of the Pennsylvania Association of Nurserymen, spoke of the possibility of a joint meeting of the Pennsylvania and New Jersey associations. It was suggested that the business meetings could be conducted separately and the general program could be shared. It was moved and passed that the president be empowered to make arrangements to this end with the Pennsylvania association.

It was also moved and passed that a committee be named to study means of standardizing grades of nursery stock in New Jersey.

Prominent Speakers.

After the business meeting, R. P. White, executive secretary of the A. A. N., was given a warm welcome back among his old friends, and he was persuaded to give an impromptu talk. Dr. White stressed the need for the nursery trade to bring its stock before the public and suggested the potentialities of educational movies, especially movies for school children.

Other speakers on the afternoon program were former Governor Harold G. Hoffman, now director of the state's unemployment compensation commission, and C. P. Wilbur, director of the department of conservation and development. Mr. Wilbur gave a most inspiring address, calling attention to the surprising riches the state still possesses in natural wealth and predicting that New Jersey can be developed into an ideal recreation and vacation land. The state's rich historical tradition augments these possibilities, Mr. Wilbur emphasized.

After some reels of talking moving pictures, giving interesting and often amazing insights into the growth of roots of plants, beetles and fungi, the meeting adjourned to the Roger Smith hotel, in New Brunswick, where a banquet was in readiness. This was accompanied by music from the skilled trio that Bill Howe has the amazing facility of producing at opportune moments, and also by the diverting skill of a magician whom Lou Schubert presented under various auspices. The meeting broke up gradually, depending to some extent on the distance to be traveled, and everyone seemed to feel that the day had been a profitable and a pleasant one on many counts.

Ben Blackburn, Sec'y.

INSPECT NEW YORK PROJECTS.

The advisory committee of the New York State Nurserymen's Association spent August 4 visiting the experiment station, at Geneva, and Cornell University, at Ithaca, looking over the projects on nursery work being conducted and advising with the specialists at the two institutions. The group was headed by Les Engleson, president of the association, from Newark, N. Y.

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Nurserymen since 1898
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Our Specialty LINING-OUT STOCK

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PIERIS JAPONICA 100 rate 1000 rate
3 to 6 ins., 1-yr. tpl. \$0.12 \$0.10
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12 to 15 ins., B&B...\$0.75 \$0.65
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**SUPERIOR
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PRIVET and BERBERIS Splendid Stock

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THE WESTMINSTER NURSERIES WESTMINSTER, MARYLAND

Fruit and Shade Trees, Evergreens, Shrubbery, all sizes up to 1 ft. California Privet, 3 to 7 ft., in grades. Heather, assorted, 3 to 12-in. clumps. Evergreen Privet and Barberry, Perennials, etc.

We have a very complete line.
Trade list sent on request.

CHARD RESIGNS POSITION.

H. S. Chard, Painesville, O., announced his resignation, July 29, of the position of secretary and sales manager of the Storrs & Harrison Co., a position which he had held for several years. Mr. Chard, who had been with the company for twenty-four years, has served as president of the Ohio Nurserymen's Association, the Lake County Nurserymen's Association and the Ornamental Growers' Association and has been active in the American Association of Nurserymen.

LOVETTS IN ACCIDENT.

Returning home from the A. A. N. convention at Detroit, Lester C. Lovett and his son met with a terrifying accident in the form of an automobile collision as they were approaching Gettysburg, Pa. The occupants of the car were quite badly shaken up. Mr. Lovett was the most severely injured, suffering a slight brain concussion and two badly sprained wrists, a small bone being broken in his left hand. But he is again at his desk at Little Silver, N. J., entirely recovered except that his wrists still pain a little.

Vance Lovett, who was driving, attempted to pass a truck and was hit by an automobile coming from the opposite direction, the latter car having been below a hill which was almost invisible from the driver's seat of the Lovett car. Both drivers applied their breaks, causing the cars to skid, and they finally collided.

HAIL AT PRINCETON, ILL.

The hailstorm at Princeton, Ill., Monday night, July 25, which gave rise to some tall stories in newspapers and over the radio, was exceptionally severe in a limited area. It was of unusual duration for a hailstorm, the stones falling over a period of nearly an hour at some places and more than a half-hour over a considerable area, according to report. Some of the stones were extremely large, but the measurement of seven or eleven inches applied to circumference rather than diameter.

In the northern part of Princeton the storm did much damage to windows and roofs of homes. Shade trees were pretty well stripped of foliage in some cases, and gardens were absolutely cleaned out.

Bryant's Nurseries, farther south, suffered practically no damage at the home place, according to Miles W. Bryant. Only one pane was lost out of the propagating sash, and no real damage has been noted on the nursery stock. The worst consequences were seen in the apple orchard on the west farm, which was just on the edge of the storm. The extent of the damage there will probably not be known until the apples are graded in autumn, but in view of the severity of the storm a short distance away, the Bryants felt fortunate. Princeton was in the path of a severe hailstorm on Thanksgiving eve, 1934.

I. R. GODFREY, 63, a nurseryman who resided near Tyler, Tex., died July 14 after an illness of three weeks. He had resided in Smith county thirty-five years.

ROLAND DE WILDE, of the Perkins-De Wilde Nurseries, Inc., Shiloh, N. J., with Mrs. De Wilde, is on a two months' trip abroad, visiting England and Holland.

SHADE TREES

Offered for Fall '38 or Spring '39 at the following low prices:

Norway Maple	Per 10	Per 100
5 to 10 ft.	\$ 2.50	\$75.00
10 to 12 ft.	10.00	90.00
1 1/2 to 2-in. cal.	12.50	115.00
2 to 2 1/2-in. cal.	17.50	165.00

Pin Oak	Per 10	Per 100
2 to 2 1/2-in. cal.	20.00	175.00

Lombardy Poplar	Per 10	Per 100
5 to 10 ft.	3.00	22.50

Weeping Willow	Per 10	Per 100
6 to 8 ft.	6.00	50.00

Jap. Cherry (Kwanzan)	Per 10	Per 100
5 to 6 ft.	11.00	100.00

Other sizes and varieties of Shade Stock quoted on request.

WAYNESBORO NURSERIES, INC.
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We specialize in
APPLE AND PEACH TREES
Strawberry, Asparagus, Raspberry and Blackberry plants.
Grapevines, 1 and 2-year.

OUR MANY YEARS' PRODUCTION EXPERIENCE COMBINED WITH OUR FAVORABLE LOCATION ENABLES US TO OFFER STOCK THAT MUST PLEASE AT PRICES YOU WILL APPRECIATE.

Submit your definite list for quotations.

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SPECIMEN and LINING-OUT STOCK

Evergreens, Shade Trees,
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Erosion-Control Plant Materials.
200 acres of stock in fine condition.
We invite your inspection.

Fairview Evergreen Nurseries
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Located on U.S. 20, 12 miles west of Erie.

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Cuspidata, 15-in. to 6-ft. spread
Pachysandra Terminalis
Potted, 2-yr. field-grown, also rooted cuttings.

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KOSTER BLUE SPRUCE

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Sta. 5 Cromwell, Conn.

Pennsylvania Meeting

*Talks by Staff Members Feature
Two-day Program at State College*

Thirty-five to forty members of the Pennsylvania Nurserymen's Association convened at State College, August 3 and 4, for the annual summer meeting. In the absence of the secretary, Albert F. Meehan, who is on an ocean cruise, Walter Staton read the minutes of the previous meeting and took the roll call.

President Harold G. Seyler remarked that a number of the old stand-bys were absent, among whom were Robert Pyle, A. E. Wohler and Louis U. Strassburger. Mr. Pyle had been on an extended tour of Europe and will be heard from later.

A word of welcome and greeting from Dr. Warren B. Mack, of the department of horticulture, was well received. All were interested and quite in sympathy with a rational but ambitious program proposed for Pennsylvania State College, which he hoped would be realized. It embraced rather complete show grounds, hardy perennials interspersed with evergreen trees and shrubs, and a large and well balanced arboretum covering many acres. It meant, he said, a great outlay of money to develop and obtain what he considered necessary for a more rounded-out course in horticulture for the students who in the past and present curriculum could only count their field lesson in so many short hours instead of many days. This, he said, was the weakness of the college men, that at the end of their course they lacked the really close intimacy with plants so necessary to a full success in their life's work.

Prof. J. W. White's talk on "Getting Better Acquainted with the Soil" was both interesting and instructive. Out of his many years' association with the subject of soils he gave us the outcome of experiments in manuring with farmyard, chemical and green manures, which were rather surprising to many of us. One outstanding thought presented was that crops like nursery stock would do better with less cultivation than is generally conceded and that a coverage of low vegetation, not too aggressive of course, between the plants would be beneficial rather than detrimental. This thought, coming as it does on the heels of a depression, was heartily received by many of the nurserymen, who for several years past have, perforce rather than by choice, allowed a good coverage of weed growth among their acres of nursery stock, and in despair fell back on the use of the old-fashioned scythe and the sickle instead of cultivation.

Assistant Prof. A. O. Rasmussen, who spoke on "Ornamental Activities in Pennsylvania," was much at home with his theme, and one could see a good bit of the practical sticking out of the theoretical, which after all is but natural when we know that he is the son of a gardener, his father having charge of a large estate in suburban Philadelphia.

The day continued with a conducted tour of the college grounds and experimental plots. A spraying demonstra-

tion was given by Albert Vick with his efficient dust-spray outfit.

Guests at the dinner held at the Nittany Lion Inn were: J. Hansel French, secretary of agriculture; H. L. Watts, dean of the school of agriculture; R. H. Bell, director of bureau of plant industry; E. I. Wilde, professor of horticulture; R. P. Meahl, assistant professor of horticulture, and R. B. Meaney, chief nursery inspector.

Mr. French, in his genial manner, spoke encouragingly on the outlook for agriculture and horticulture in the state. During his tenure of office he has seen great strides made in these two important state industries. Mr. French has never been absent from any of the association's semiannual meetings since he has filled the office of secretary of agriculture and has been willingly helpful at all times.

At Thursday's meeting, H. W. Stover, assistant professor of economics in arts and science, gave a talk on business management, and while academically he covered his points well, the nurserymen present did not relish being told they were poor salesmen and mediocre businessmen. Illustrating his point, he said that he had bought trees from a department store rather than at a nursery because the salesman, though ignorant of plants in this particular instance, had manifested more interest and persistence than any of several nurserymen.

It was decided after a conference with representatives of the New Jersey Nurserymen's Association, who were present, to hold the next annual winter meeting in Philadelphia, where New Jersey nurserymen would hold their meetings on the same days, dates to be determined later.

Reports of delegates who had attended the A. A. N. convention at Detroit were well received. All three delegates, namely, H. G. Seyler, Eugene Muller and Charles Hetz, spoke

highly of the spirit of satisfaction and especially of coöperation that were so apparent at the convention and felt that the A. A. N. had indeed become revitalized.

With a hearty vote of thanks to the speakers and to all who had contributed to the success of the summer meeting, an adjournment was called.

Edwin Matthews.

TEXAS RATE HEARING.

The Texas railroad commission held a hearing, July 18, at Dallas, on an application of the railroads to raise column 20 to column 25 for 30,000-pound carloads of balled and burlapped nursery stock and to raise the classification of L.C.L. shipments.

The Griffing Nurseries, Beaumont, were represented by H. C. Eargle and the Texas Association of Nurserymen by J. M. Ramsey. They asked the commission to continue the rate of column 20 and not to raise the classification of nursery stock of L.C.L. shipments.

The decision of the commission will not be issued for several weeks.

BUSINESS RECORDS.

Elmsford, N. Y.—An extension until November 1 for filing a plan for reorganization of Elmsford Nurseries, Inc., was granted July 25 in the federal District court in New York city. Judge Robert Patterson allowed the extension after creditors indicated they had no opposition. The extension is conditioned upon payment, within eight days after the signing of a formal order, of \$2,476.43 to the holder of a mortgage against part of the real estate, to satisfy defaults in taxes and interest. If this payment is made, Judge Patterson will continue in effect an injunction restraining efforts to foreclose on the mortgage pending disposition of the reorganization.

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Several of the newer varieties.

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MASSACHUSETTS MEETING.

Despite stormy weather, the nurserymen of western Massachusetts and the Connecticut valley held a successful meeting at Massachusetts State College, Amherst, July 29.

Dr. R. A. Van Meter, in opening the meeting, extended his remarks to call brief attention to some of the significant facts about plant hardiness. In addition to referring to the properties of hardiness inherent in commonly cultivated plants, Dr. Van Meter called attention to late growth, nutritional deficiencies and abnormal or accidental defoliation as other factors which may weaken plants through reduction of reserve materials.

Prof. W. D. Whitecomb, of Massachusetts State College, and Dr. M. P. Zappe, of the Connecticut agricultural experiment station, then gave consideration to the problems of insect control in the general nursery. Professor Whitecomb emphasized preventive measures in the form of a carefully planned and regularly followed spray schedule. He also discussed specific control measures to be taken against some of the more common pests and made some observations on some of the newer insecticides.

Dr. Zappe continued the discussion by citing examples of the losses which may come from neglect to eliminate insect infestation at the time of discovery. It was brought out here that held-over or transplanted blocks are usually the most infested. Thus arose the question as to the advisability of transplanting surpluses of certain easily grown items, and also, whether in the case of heavily infested plants, insect control or destruction of the host plants was the more economical procedure.

In the afternoon, Dr. Malcolm MacKenzie presented a résumé of the woody plant disease situation. It seems that the wet season and recent prolonged periods of high relative humidity have made for increased spread of many parasitic fungi, particularly those causing leaf spots.

Prof. William Doran then made a practical discourse, with his own research as a background, on the matter of improvement of seed germination through control of soil fungi. He stated that different chemicals and methods of applying them varied in their efficacy according to the type of seed, physical condition of the soil and time interval between treatment of sowing.

He also discussed the handling of cuttings in frames and greenhouses. He emphasized the importance of time of taking each particular type of cutting, stated that coarse sand seemed to work better and announced that many common cuttings will root well in sandy soil.

The meeting was closed by Dr. J. K. Shaw, who gave a brief summary of the work now being done with clonal understocks of apple.

JUDD TOURS EUROPE.

William H. Judd, of the Arnold Arboretum, Jamaica Plain, Mass., was among the passengers aboard the Cunard-White Star liner, Seythia, which sailed July 23. He plans to travel through Holland, France, Norway, Sweden, Denmark and the British Isles, visiting various nurseries and arboreta and purchasing trees and shrubs.

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ELM, American, Moline and Vase, up to 4 ins. All transplants.

MAPLE, Norway, up to 3½ ins. Transplants, extra select, spaced 7x7 ft.

POPLAR, Lombardy, up to 2 ins.

WILLOWS, Thurlow, up to 3 ins.

BARBERRY, Thunbergii, up to 2 to 3 ft.

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Coming Events

SHADE TREE CONFERENCE.

The fourteenth annual Shade Tree Conference will be held August 30 and 31 and September 1 and 2 at the Coronado hotel, St. Louis, Mo. This is the first conference to be held in the central west. Present officers are: President, Karl Dressel; vice-president, R. P. White; secretary-treasurer, L. C. Chadwick; editor, A. M. S. Pridham, and executive committee, H. M. Van Wormer, W. E. Parker and H. L. Jacobs.

The program is as follows:

TUESDAY, AUGUST 30.
Registration.
3:00 P. M. Plant clinic.
7:00 P. M. Meeting of commercial arborists and visit to trade exhibits.

WEDNESDAY, AUGUST 31.
9:00 A. M. Registration and visit to trade exhibits.

1:30 P. M. Welcome by Bernard F. Dickmann, mayor of St. Louis, and response by Karl Dressel.
2:00 P. M. Business meeting.
3:30 P. M. "Trees of Missouri," by George Mattingly, Missouri state highway department.
4:00 P. M. "Safety Practices," by F. W. Strufe, safety director, Davey Tree Expert Co., Kent, O.

4:30 P. M. Discussion.
7:30 P. M. Meeting of American Society of Arborists.

THURSDAY, SEPTEMBER 1.
9:00 A. M. "City Forestry Problems," by C. E. Smith, city forester, Detroit, Mich.
9:30 A. M. "Tree Surgery West of the Rockies," by E. H. Scanlon, secretary, Western Shade Tree Conference, Santa Monica, Cal.

10:00 A. M. Discussion.
10:15 A. M. "Tree-moving Practices in the Mississippi Valley," by Vance Shield, Clayton, Mo.

10:45 A. M. "Effect of Some Synthetic Growth Substances on Root Development of Transplanted Trees," by Dr. Paul Tilford, Ohio agricultural experiment station.

11:15 A. M. Discussion.
11:30 A. M. Busses leave for trip to Missouri botanical garden.

12:15 P. M. Buffet luncheon at Missouri botanical garden.

1:30 P. M. Visit to Missouri botanical garden, and demonstration of scientific instruments and field experiments, by Dr. A. P. Bellmann, Missouri botanical garden. Field demonstration of commercial equipment.

7:30 P. M. Banquet, entertainment and dancing.

FRIDAY, SEPTEMBER 2.
9:00 A. M. "Value of Trees in Landscape Composition," by John Noyes, landscape architect, St. Louis.

9:30 A. M. "Spraying Practices and Materials," by C. R. Cleveland, entomologist, Standard Oil Co.

10:00 A. M. Discussion.
10:15 A. M. "Trees and Flowers," by Dr. A. P. Bellmann, Missouri botanical garden.

10:45 A. M. "Shade Tree Insects of the Midwest," by Dr. W. P. Flint and Dr. M. D. Farrer, state natural history survey, Urbana, Ill.

11:15 A. M. "Shade Tree Diseases of the Midwest," by Prof. Forrest C. Strong, Michigan State College of Agriculture.

11:45 A. M. Discussion.

2:00 P. M. Business meeting.
2:30 P. M. "Diagnosing Shade Tree Troubles," by A. W. Dodge, Bartlett Tree Expert Co., Cambridge, Mass.

3:00 P. M. "Basic Principles of Shade Tree Pruning," by Norman Armstrong, White Plains, N. Y.

3:30 P. M. Discussion.
3:45 P. M. Adjournment.

A special program has been arranged for the ladies and is as follows:

WEDNESDAY, AUGUST 31.
10:00 A. M. Registration.
12:30 P. M. Group luncheon for ladies.
2:00 P. M. Inspection trip to Mavroks Candy Co.

THURSDAY, SEPTEMBER 1.
9:30 A. M. Sight-seeing trip through Forest park and visit to the St. Louis zoological gardens.
12:15 P. M. Buffet luncheon at Missouri botanical garden.

7:30 P. M. Banquet.

FRIDAY, SEPTEMBER 2.
9:30 A. M. Visit to municipal opera with an opportunity to visit back-stage. Trip to art museum and Lindbergh's trophies.

For those who wish it, a regular Mississippi river boat trip can be taken Friday at 9:30 a. m., returning to St. Louis at 5 p. m.

DELPHINIUM MEETING.

The American Delphinium Society will hold its annual meeting at the nurseries of Jackson & Perkins Co.,

Newark, N. Y., during the last week in August, the date to be set later. The company has 250,000 delphinium hybrids in the nurseries coming into flower either as seedlings or as second-crop blooms from selections.

TEXAS PROGRAM.

The Texas Association of Nurserymen will hold its annual convention September 7 and 8 at the Driskell hotel, Austin, according to an announcement from Harvey Mosty, secretary. The meetings will be presided over by Ray Verhalen, Scottsville, president of the association, and all persons engaged in the various branches of horticulture are invited to attend.

The program, which is being completed by Mr. Verhalen and the executive committee, will cover subjects that concern every nurseryman and dealer in the southwest and will be of interest to landscape architects as well. Among the subjects to be discussed are the proposed rewriting of the Texas nursery inspection law, which will come before the legislature in January; social security law, wages and hours law, selling of plants by tax-supported institutions, and solicitation and practice of landscape work by professional men paid salaries by tax-supported institutions. Suitable entertainment is also being provided. The program in detail will appear in the next issue.

CLEVELAND DRAWS GARDENERS.

Hon. Martin L. Davey, governor of Ohio, will be the guest speaker at the annual banquet to be held the evening of the second day of the twenty-eighth annual convention of the National Asso-

ciation of Gardeners, at the Hotel Hollenden, Cleveland, August 23 to 25. E. V. Newton, vice-president of the Cleveland Trust Co., will be toastmaster and will call on Mrs. Guy Myers, president of the Federated Garden Clubs of Ohio; A. D. Taylor, president of the American Society of Landscape Architects, and Harold Madison, director of the Cleveland Museum of Natural History.

The convention will be opened at 2:30 o'clock August 23 by Robert B. Brydon, Cleveland, general convention chairman.

CONVENTION CALENDAR.

August 15 and 16, Kentucky State Nurserymen's Association, summer meeting, Butler park, Carrollton.

August 17, Ohio Nurserymen's Association, summer meeting, Parnly hotel, Painesville.

August 18, Wisconsin Nurserymen's Association, summer meeting, Brown Deer, Wis.

August 30 to September 1, annual National Shade Tree Conference, Coronado hotel, St. Louis, Mo.

September 7 and 8, Texas Association of Nurserymen, annual meeting, Driskell hotel, Austin.

September 28 to 30, California Nurserymen's Association, annual meeting, Hotel Roosevelt, Hollywood.

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please. Supply limited.

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WASHINGTON ELECTION.

At a meeting of the Washington State Nurserymen's Association held July 28 at Seattle, officers were elected for the ensuing year as follows: President, W. L. Fulmer, Seattle; vice-president, Howard E. Andrews, Seattle; secretary-treasurer, Harold T. Hopkins, Bothell, and state vice-presidents, Harry X. Kelly, Spokane; John Snyder, Wenatchee; Fred May, Yakima; R. R. Williams, Tacoma; John M. Baila, Aberdeen, and C. De Lange, Lynden.

R. M. Smith, president of the Associated Farmers of Washington, told of the work being done by that organization in securing legislation for the farmers.

Richard P. White, executive secretary of the American Association of Nurserymen, will be present at the meeting to be held October 7.

W. L. Fulmer received a visit from Norvell Gillespie, who is in the Pacific coast section collecting rare and interesting plants for the Golden Gate International Exposition, where a special building has been set aside on the exposition grounds for a flower display. He is urging nurserymen to send outstanding plants to this display.

OKLAHOMA SHORT COURSE.

Forty-three nurserymen were registered for the Oklahoma nurserymen's short course, held at Oklahoma A. & M. College, Stillwater, August 5, in conjunction with the farmers' week program. The attendance was much greater than at last year's inaugural course. The subjects and speakers who discussed them were: "New Developments in the Propagation of Plants by Cuttings," by Prof. R. O. Monosmith; "Insect Pests," by Dr. F. A. Fenton; "Management of Nursery Soils," by Dr. Horace J. Harper; "Some Problems Encountered in Propagating Plants by Means of Seed," by Dr. Michael Afanasiev; "Some Current Problems in Growing Healthy Nursery Stock," by Dr. K. Starr Chester; "Methods Used in Producing Red Cedars for Understocks," by L. G. McLean, and "New Plants and Varieties in the Nursery Trade," by C. E. Garee, Noble Nurseries, Noble.

In addition to these discussions, a visit to the forestry nursery was conducted by Mr. McLean, Mr. Monosmith and Dr. Afanasiev.

LOS ANGELES, CAL.

The Union Nursery Co., Los Angeles, has been awarded the contract to furnish 90,000 plants for the Santa Anita race track. The nursery will handle the planting also. Calendulas, in orange and yellow; pansies, and other winter-flowering plants will be used and, placed six inches apart, will furnish a solid bed of color.

Bids for the landscaping of the California state offices in the Los Angeles civic center will be opened August 16, with actual work beginning about September 1, it was announced last week. Detailed landscaping plans were released from Sacramento at the same time. Three lawn-covered terraces will give access to the main entrance of the State building. Topsoil planted to lawn and trees will cover the subterranean garage, constructed to hold seventy motor cars in state use.

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Fruit Tree Seedlings
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Grown right and packed right

Combination carloads to eastern distributing
points save you on freight.

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Fruit, Shade, Flowering and Ornamental Trees, Fruit Tree and Chinese Elm Seedlings.

Car lot advantages to all points east.
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Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.

Very complete line of quality stock
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1436 N. E. Second Ave. PORTLAND, ORE.

Largest Fruit Tree Seedling Growers
in America.

We accept growing contracts for 3 to 5 years.
Quality stock. References on request.

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Multiflora Japonica, rooted cuttings.

Quince stocks and seedlings.

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LANDSCAPERS DISCUSS PRICES.

Columbus Group Meets.

The July meeting of the Columbus Landscape Association was held at the home of Howard Warwick, Columbus, O., the evening of July 19. A large number of members were in attendance. President Harold C. Esper called the meeting to order and Secretary William Speed read the minutes of the previous meeting, the roll call and correspondence received since the last meeting. Cards of thanks were read from the Esper and Rinderknecht families for flowers received from the association.

President Esper announced that since he is now connected with the building and loan profession rather than landscape work, he would turn the presidency over to another member if so desired, but this suggestion met with a storm of disapproval.

The committee on park improvement announced that an invitation had been received from the chairman of the similar committee of the local chamber of commerce for the two committees to get together and formulate a plan of action. This meeting will be held in the near future.

Bills were presented by various members for plant materials used in the landscaping of the remodeled home located temporarily on the lawn of the City Hall, but action toward the payment of the bills was deferred until word was heard from the promotion manager of the home, who had promised to reimburse the members, at least partially, for the plants.

Tentative Prices Given.

G. Bret Slemmons, of the committee on prices, stated the committee had met two times since the last regular meeting of the club. He presented the tentative list of prices agreed upon as average by the committee. This list was supplemented, due to suggestions from other members, with the result that the following quotations were among those agreed upon as fair average prices to be paid by clients for work done by members of the association:

Rough grading—50 cents per cubic yard if by team; \$1 per cubic yard if by hand (on site).
Finished grading—10 cents per square yard.
Sodding—500 yards or over, 22 cents per square yard; under 500 yards, 25 cents per square yard.
Well rotted manure—\$3.50 per cubic yard.

Topsoil—\$2 per cubic yard.
Plowing, harrowing, fertilizing, seeding and rolling (materials extra)—if from 500 to 1,000 square yards, 15 cents per square yard; if from 100 to 500 square yards, 20 cents per square yard, and 100 square yards or under, 25 cents per square yard.

Renovating old lawns (top-dressing with soil, fertilizing and seeding, labor only)—10 cents per square yard.

Spading and raking new beds—20 cents per square yard.

Planting hedges—10 cents per foot.

Planting shrubs in unprepared beds—25 cents each; in prepared beds, 15 cents each.

Planting evergreens and balled trees in quantities: 2 to 3-foot, 30 cents; 3 to 4-foot, 40 cents; 4 to 5-foot, 60 cents; 6 to 7-foot, \$1; 7 to 8-foot, \$2; 9 to 10-foot, \$3, and 10 to 12-foot, \$5.

Planting trees, bare root (including wrapping trunks): 6 to 8-foot, 60 cents; 5 to 6-foot, 30 cents; 8 to 10-foot, 75 cents; 10 to 12-foot, including staking, \$1.50; 12 to 14-foot, including staking, \$2; 2½ to 3-inch, including staking, \$2.50; 3 to 4-inch, including staking, \$4, and 4 to 5-inch, including staking, \$6.

Planting perennials in new beds—10 cents each.

Excavating—\$1 per cubic yard.

It was brought out further that while these figures seem about right for this section of the country, on special jobs there would obviously be some variation one way or another. It was decided, due to the lateness of the hour, to dispense with quotations on tree moving,

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NURSERYMEN!

Spray with, and
recommend



IMP.
SOAP
SPRAY

Use 1 part with 25 to 40
parts of water

Ask your nearest seedsman, or
write for literature.

THE AMERICAN COLOR
AND CHEMICAL CO.

176 Purchase St.

Boston, Mass.

spraying and tree surgery, and Mr. Speed was appointed to get these figures, together with others, to the president within the next few days, so that the complete list could be mimeographed in time for the next meeting.

Mr. Speed brought out the fact that there is a high mortality of American elms in this section, with verticillium wilt and a newer disease, which is known commonly as the "Dayton jitters," being the contributing causes in most instances. Mr. Speed stated that in one of the smaller parks in Columbus approximately three-quarters of the American elms were found to be infected with the latter trouble. While pathologists working on this problem have issued no definite statement as to the causal organism, at least a few at present are of the opinion that it is caused by a virus.

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We will have

**APPLE,
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PLUM,
PEAR and
CHERRY**

trees in carload quantities to offer the trade for November delivery.

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Carload quantities in all grades at attractive prices.

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We have a few hundred pounds 1937 crop taken from trees free from leaves and trash. White-flowering Cornus Florida, 25¢ per lb.

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7/16, 9/16 and 11/16-inch.

Leading varieties.

50,000 Chinese Elm seedlings.

Will exchange for Lining-out Evergreens and Shrubs.

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OBITUARY.

Thomas R. Norman.

Thomas R. Norman, 63, who had long been a nurseryman in Lake county, Ohio, died unexpectedly Sunday, July 24, at his home at Geneva, where he had lived for the past two years since his retirement as head of the T. R. Norman & Sons nurseries, Painesville.

Mr. Norman established the nursery thirty-three years ago at his home on Hale road, where he planted out his first crop on a one-acre plot. Subsequently, under his direction, the business became one of the better known establishments in the county. He had served on the Painesville rural school board and was a member of the Painesville Odd Fellows.

Survivors are the widow; two daughters, and four sons, Carlos O. and Ralph T., Painesville, and Otto W. and Forrest R., Geneva. Burial was in Evergreen cemetery, Painesville.

Sidney Clack.

A native of England and a wholesale nurseryman for sixty-eight years, Sidney Clack, a resident of Alameda, Cal., for the past seventeen years, died in a rest home in that city July 26. He had been ill for three months. His age was 89. Six children survive him, four daughters and two sons, George and Theodore Clack. Funeral services were held Friday morning, July 29, under the auspices of the Palo Alto lodge of Masons, of which he was a member.

SOUTHWESTERN NOTES.

E. S. Welch, president of the Mount Arbor Nurseries, Shenandoah, Ia., left July 29 for a trip to California, from which he will return September 1. Mr. Welch, who has extensive holdings in California, has begun to propagate roses on his ranch near Ceres.

George L. Welch, Jr., formerly manager of the Kelsey Nurseries, St. Joseph, Mo., is joining the Mount Arbor Nurseries, Shenandoah, Ia., where he will assist in the management of that firm.

F. P. Eshbaugh, nurseryman at the Fort Hays experiment station, Hays, Kan., returned the first week in August from a vacation in California.

Schweining's Floral & Nursery Co. is now known as Antlers Greenhouse & Nursery, Antlers, Okla.

O. W. Hinshaw, formerly of the Greenwood County Nursery, Eureka, Kan., is now manager of the Riverside Nurseries & Gardens, 1636 South Harvard, Tulsa, Okla. The Greenwood County Nursery has discontinued business at the Eureka address.

J. C. Banta, son-in-law of E. R. Taylor, has left the insurance business in Topeka to be associated with the firm of L. R. Taylor & Sons, Topeka, Kan. Mr. Banta has been calling on the nursery trade.

Kansas was represented at the national convention in Detroit by the following: Robert and Mrs. Adair, of the Wathena Nursery, Wathena; C. A. and George Chandler, of the Chandler Landscape & Floral Co., Kansas City; E. R. Taylor and J. C. Banta, of L. R. Taylor & Sons, Topeka; A. B. Calkins and H. C. Danbury, of the Garden Shop, Inc., Kansas City, and H. S. Crawford, of the Willis Nursery Co., Ottawa.



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DKC

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Our hundred-acre isolated orchard block of carefully propagated trees for root stock purposes only (fruit has no value) is coming into seed production rapidly.

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Correspondence and propagating orders solicited.

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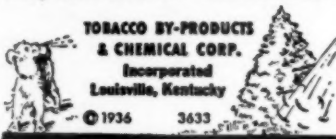
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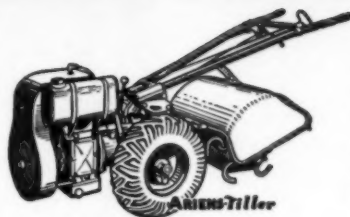
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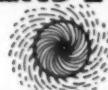
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